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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF IOWA
WESTERN DIVISION

MAYTAG CORPORATION, Plaintiff, vs. ELECTROLUX HOME PRODUCTS, INC., d/b/a FRIGIDAIRE, Defendant.	No. C 04-4067-MWB **MEMORANDUM OPINION AND ORDER REGARDING CONSTRUCTION OF DISPUTED PATENT CLAIM TERMS**

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This patent infringement action, which involves patents for plastic washing machine baskets and the process for making them, comes before the court for construction of disputed patent claim terms, *i.e.*, for a ruling after a so-called "*Markman* hearing." *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996). Among the issues that the court must decide is whether

it should construe only the seven patent claim terms that the plaintiff contends are in dispute in relation to its infringement claims or the nineteen terms identified by the defendant as in dispute and material to either the plaintiff's infringement claims or the defendant's invalidity defenses. A further issue is the extent to which any construction is required for claims that are to be given their "ordinary meaning."

As has been the case in nearly all of the patent litigation that has come before this court, these and the other pertinent issues are both hotly contested and ably argued by both sides, even where particular disputes seem, at first blush, to be merely nit-picky, if not downright implausible. In this context, one of the parties cited this apt excerpt from a remarkably wise children's story:

> "When *I* use a word," Humpty Dumpty said, in rather a scornful tone, "it means just what I choose it to mean—neither more nor less."
>
> "The question is," said Alice, "whether you can make words mean so many different things."
>
> "The question is," said Humpty Dumpty, "which is to be master—that's all."

LEWIS CARROLL, ALICE'S ADVENTURES IN WONDERLAND AND THROUGH THE LOOKING GLASS 219 (George Stade ed., 2004) (1871) (emphasis in the original). The irony in this case is that it is not altogether clear to the court just who is being Humpty Dumpty.

I. INTRODUCTION

A. Procedural Background

Plaintiff Maytag Corporation (Maytag), a Delaware Corporation with its principal place of business in Newton, Iowa, filed this patent infringement action on July 23, 2004, against defendant Electrolux Home Products, Inc., doing business as Frigidaire (Electrolux), a Delaware corporation licensed to do business and doing business in Iowa

and elsewhere, with its principal place of business in Cleveland, Ohio, but with manufacturing facilities in this District. Maytag alleges in its Complaint (docket no. 2) that Electrolux is willfully infringing two patents assigned to Maytag: U.S. Patent No. 5,881,909 (the '909 patent), entitled "PLASTIC WASHING MACHINE BASKET," and U.S. Patent No. 5,980,809 (the '809 patent), entitled "METHOD FOR MOLDING A PLASTIC WASHING MACHINE BASKET." Maytag seeks judgments of infringement and willful infringement of both patents, preliminary and permanent injunctive relief from such infringement, treble damages with both pre- and post-judgment interest, and attorneys' fees. Electrolux answered Maytag's Complaint on October 25, 2004 (docket no. 10), denying Maytag's infringement claims and asserting several affirmative defenses, including invalidity of the patents-in-suit, as well as counterclaims for declaratory judgments of non-infringement and invalidity of the patents. Maytag replied to Electrolux's counterclaims on November 16, 2004 (docket no. 18), denying those counterclaims.

A Scheduling Order, Discovery Plan, and Order on Miscellaneous Pretrial Matters (docket no. 17) and a separate Order Setting Trial, Final Pretrial Conference And Requirements For Final Pretrial Order (docket no. 20) were filed on November 9, 2004, and November 30, 2004, respectively. Pursuant to the Scheduling Order, a *Markman* hearing was originally scheduled for June 3, 2005, with interim deadlines for the filing of charts identifying the patent claims that the plaintiff alleges are infringed; the defendant's admissions concerning characteristics identified by the plaintiff that are present in the accused device and identification of those that the defendant contends are not present; identification of extrinsic evidence supporting each party's claim constructions; a joint claim construction statement; and briefing of claim construction issues. Discovery disputes, disputes concerning which claim terms the parties were required to define, and

other events required the rescheduling of the pertinent deadlines and the *Markman* hearing itself, first to July 29, 2005, then to September 29, 2005, then to October 28, 2005, and ultimately to December 5, 2005. Trial has also been rescheduled to October 23, 2006.

In an Order dated September 6, 2005 (docket no. 61), on Maytag's Objections (docket no. 48) to United States Magistrate Judge Paul A. Zoss's May 31, 2005, Order (docket no. 36), the court attempted to resolve, at least for purposes of preparing for the *Markman* hearing, a dispute concerning the claim terms for which the parties were required to proffer definitions. Specifically, Judge Zoss had ordered Maytag, *inter alia*, "to put in writing its own suggested definitions of the thirty terms listed by the defendant, or alternatively, to state its agreement with the defendant's suggested definition(s) [and to] identify the extrinsic evidence supporting its proposed definitions." Order, May 31, 2005 (docket no. 36), 4. Maytag had objected to this portion of Judge Zoss's order on the grounds that Federal Circuit precedent makes clear that terms not in controversy should not be defined; that only ten claim terms, not thirty, are in dispute; that the plain and ordinary meaning of those ten terms should prevail; that forcing Maytag to define terms that are unambiguous and not in controversy takes fact issues of infringement away from the jury; and that forcing Maytag to define terms not in controversy could adversely affect future cases against other defendants.

This court, however, overruled Maytag's objections, finding that the portion of the May 31, 2005, Order to which Maytag objected was neither "clearly erroneous" nor "contrary to law." *See* FED. R. CIV. P. 72(a) (stating the applicable standard of review). The court explained that Judge Zoss had reasonably concluded that, at least prior to the exchange of proposed definitions, all thirty terms identified by Electrolux were in controversy, based on Electrolux's representation that Maytag had rejected Electrolux's definitions of all of those terms; that the "ordinary meaning" of patent terms is the

"ordinary meaning . . . *as understood by a person of skill in the art*," *see Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (*en banc*) (emphasis added), which might require determination of proper definitions; that requiring the parties to *submit* proposed definitions of all terms on which the parties could not agree did not necessarily mean that the court would ultimately construe all of those terms; that Maytag could not simply assert that the terms did not require definition, then reserve the right to present extrinsic evidence to dispute Electrolux's proposed definitions of those terms; and that the court was not persuaded by Maytag's list of "horribles" flowing from an order requiring Maytag to present its proposed definitions of terms, even terms that the court might subsequently find are not in controversy or do not require any definition. Order of September 6, 2005 (docket no. 61), 2-3. Therefore, the court directed Maytag to comply with Judge Zoss's May 31, 2005, Order, in its entirety.

Unfortunately, the September 6, 2005, Order did not settle the question of what the parties were required to submit in preparation for the *Markman* hearing. The parties were able to agree on the definitions of six claim terms in their Corrected Joint Claim Construction Statement, filed September 22, 2005 (docket no. 67), and they each submitted opposing definitions of twenty-five other claim terms. Nevertheless, in Maytag's initial Pre-Hearing Brief On *Markman* Claim Construction Issues, filed September 30, 2005 (docket no. 71), Maytag only addressed the construction of the six claims that it contended were actually in dispute.[1] Electrolux, on the other hand, addressed in its initial *Markman*

[1]Maytag provided no argument concerning its definition of a seventh term, "knit lines," although it had identified this term as "in dispute" in the Corrected Joint Claim Construction Statement. Maytag also provided no separate argument for its definition of "a base wall including a peripheral portion from which extends an annular sidewall that diverges radially outwardly to a terminal edge," apparently on the basis that this term was (continued…)

brief the meaning of nineteen claim terms that it contended were still in dispute, for purposes of either infringement or invalidity claims.[2] Electrolux also objected to what it contended was Maytag's violation of the spirit, if not the letter, of the court's September 6, 2005, Order and other orders, by reserving until its rebuttal *Markman* brief any argument concerning the meaning of several disputed claim terms the constructions of which Maytag had not addressed in its opening brief. The court attempted to resolve this dispute, as well, by establishing a deadline of October 18, 2005, for the filing of "simultaneous surrebuttal *Markman* briefs addressing *only* arguments raised for the first time in the opposing party's rebuttal brief." Order of October 11, 2005 (docket no. 76), 2. The court opined that allowing surrebuttal briefs would mitigate the prejudice that Electrolux had alleged would arise from Maytag's improper arguments concerning additional claim terms in Maytag's rebuttal brief. *Id.*

As indicated above, the parties filed simultaneous initial *Markman* briefs on September 30, 2005, and simultaneous rebuttal *Markman* briefs on October 11, 2005. Pursuant to the court's October 11, 2005, Order, the parties also filed simultaneous surrebuttal *Markman* briefs on October 18, 2005. After the *Markman* hearing was rescheduled to December 5, 2005, the court requested, by letter dated October 29, 2005, that the parties submit briefs on or before November 14, 2005, on the role of the parties' competing definitions in the court's claim construction process and the extent to which the court must choose only between the parties' competing definitions or is, instead, free to

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[1](…continued)
a composite of other terms for which it had elsewhere proffered definitions.

[2]Electrolux conceded that there were only "insignificant" differences between its definitions and Maytag's for six claim terms that Electrolux contended were material to infringement or invalidity disputes.

construe the claim terms for itself. The parties filed those briefs as required on November 14, 2005 (docket nos. 100 & 102), generally agreeing that the court is free to disagree with any proposed construction and, instead, adopt its own constructions.

On November 28, 2005, the court sent to the parties a 106-page tentative pre-argument draft of its ruling on the issues presented in the parties' briefs for the *Markman* hearing, so that the parties could focus their oral arguments and, still more specifically, address where, in each party's view, the court had gone wrong in its analysis of pertinent issues and its construction of claim terms. The court held the *Markman* hearing as scheduled on December 5, 2005. At the hearing, plaintiff Maytag was represented by Edmund J. Sease and Jeffrey D. Harty, who each presented arguments on Maytag's behalf, as well as R. Scott Johnson of McKee, Voorhees & Sease, P.L.C., in Des Moines, Iowa. Also present for Maytag were Bruce Watson and Burgess Lowe, house counsel for Maytag. Defendant Electrolux was represented by David M. Maxwell, who presented Electrolux's arguments, as well as Frank G. Smith and Cherri Gregg of Alston & Bird, L.L.P., in Atlanta, Georgia, and Richard J. Sapp of Nyemaster, Goode, West, Hansell & O'Brien, P.C., in Des Moines, Iowa. Michael Griffith was also present as a company representative for Electrolux. The hearing involved argument of counsel and some demonstrative video and slide presentations, but no live witnesses or presentation of other evidence. At the oral arguments, the parties agreed that the opportunity to review the court's draft ruling had focused their arguments, and the oral arguments themselves demonstrated that the issues had been substantially narrowed by the court's pre-argument disclosure of its proposed resolution of pertinent issues and its proposed claim constructions. Indeed, the court found this process of disclosing a tentative draft to the parties prior to the *Markman* hearing to be invaluable in resolving the disputed issues in claim construction. Also, the court found the oral arguments to be as enlightening and

skillfully presented as any the undersigned has ever heard in more than eleven years as a United States district court judge.

The matters raised in the parties' *Markman* briefs and the *Markman* hearing are now fully submitted.

B. Factual Background

As explained more fully in the legal analysis section below, the pertinent "factual background" here, for purposes of patent claim construction, is the language of the patents-in-suit themselves, the prosecution history, and such extrinsic evidence as the parties may demonstrate is necessary to determination of the proper construction of the claim terms. *See generally Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*). Therefore, this section of the ruling will focus on the '909 patent and the '809 patent themselves, rather than on any contentions of the parties concerning infringement or invalidity of the patents-in-suit.

1. Prosecution and objectives of the patents-in-suit

The patents-in-suit are patents for plastic washing machine baskets and the process for making them. The first patent-in-suit, the "product" patent, is U.S. Patent No. 5,881,909 (the '909 patent), entitled "PLASTIC WASHING MACHINE BASKET," which is included as Exhibit 1 to Maytag's Complaint (docket no. 2-2), and as Exhibit A to its Appendix Of Exhibits To Plaintiff's Pre-Hearing Brief On *Markman* Claim Construction Issues (Plaintiff's *Markman* Appendix) (docket no. 71) (hereinafter the '909 patent). The second patent-in-suit, the "process" patent, is U.S. Patent No. 5,980,809 (the '809 patent), entitled "METHOD FOR MOLDING A PLASTIC WASHING MACHINE BASKET," which is included as Exhibit 2 to Maytag's Complaint (docket no. 2-3), and as Exhibit B of its *Markman* Appendix (docket no. 71) (hereinafter the '809 patent). Both patents stem

from a single original patent application, application number 11,893, filed February 1, 1993. However, the Examiner required "division" of the original patent application into separate patent applications. Therefore, the patentee filed application number 08/324,781, for the "process" patent on October 14, 1994, as a "division" of application 11,893. The '909 "product" patent issued on March 16, 1999, and the '809 "process" patent issued on November 9, 1999.

Both patents identify the inventors as Jack L. Craine, P. Randell Gray, and Melvin D. Colclasure, and Maytag as the assignee. Moreover, because the '809 patent is a "division" of the application for the '909 patent, the Abstract, Background Of The Invention, and Summary Of The Invention in the '809 patent, including the objects of the patent, are identical to comparable portions of the '909 patent. *Compare* the '909 patent (Abstract, Background Of The Invention, Summary Of The Invention), *with* the '809 patent (Abstract, Background Of The Invention, and Summary Of The Invention). Thus, the Abstract for both patents discloses a "method and apparatus" invention, as follows:

> A method and apparatus for molding a plastic washing machine basket includes a fixed mold core formed with teardrop-shaped projections spaced about a periphery thereof, cavity sidewall members spaced about the periphery of the mold core which carry core pins having tips adapted to abut teardrop-shaped projections on the mold core and a cavity cover member spaced about an end of the mold core and abutting the cavity sidewall members so as to define a cavity between the mold core and both the cavity cover member and the sidewall members. After injecting a plastic material to flow about the tips of the core pins and the projections so as to fill the cavity and form a plastic washing machine basket having an annular sidewall extending from a peripheral portion of a base wall with spaced apertures extending through the sidewall and teardrop-shaped grooves in an inner surface thereof extending from the apertures, the plastic washing

> machine basket can be ejected from the molding apparatus by separating the mold core and the cavity cover member and shifting the cavity sidewall members away from the mold core at a predetermined angle such that the core pins force the plastic washing machine basket to be removed from the mold core due to engagement of the core pins in the apertures of the basket.

The '909 patent (Abstract); the '809 patent (Abstract).

The Background Of The Invention for both patents explains that "there exists a need in the art for a method and apparatus for molding a plastic washing machine basket with holes in the base wall and annular sidewall thereof, without forming undesirable knit lines, in a single manufacturing step." *Id.*, col. 1, *ll.* 33-37; the '809 patent, col. 1, *ll.* 38-42. The Background identifies the following problems with the prior art: (1) the costly and time-consuming multi-step manufacturing process for metal washing machine baskets, which required shaping the metal basket and perforating the holes in separate steps; and (2) unsuccessful attempts to mold plastic washing machine baskets, which involved either a single-step process for shaping the basket and perforating the holes, but resulted in numerous knit lines that reduced structural integrity and visually indicated defects, or separate molding and perforating steps, which left burrs and sharp edges that could result in damage to garments washed in the basket. *Id.*, col. 1, *ll.* 10-32; the '809 patent, col. 1, *ll.* 15-37. Consequently, the invention in both patents had two stated objects: (1) "to provide a plastic washing machine basket which can be molded in a single manufacturing step with holes formed in both a base wall and an annular sidewall of the basket without undesirable knit lines on the inner surface of the basket"; and (2) "to provide a method and an apparatus for molding a plastic washing machine basket without knit lines on the inner surface thereof while forming the basket with spaced holes in both a base wall and an

annular sidewall thereof." *Id.* (Summary Of The Invention), col. 1, *ll.* 41-50; the '809 patent (Summary Of The Invention), col. 1, *ll.* 46-55.

The Summary Of The Invention explains how these objects are accomplished by the patented invention. However, from this point on, different parts of the Summary Of The Invention and the Detailed Description Of The Invention become pertinent to each patent, even where those parts of the patents are identical.

2. The '909 patent

Because the focus of the '909 patent is the plastic washing machine basket, rather than the apparatus for molding such a plastic washing machine basket, the pertinent part of the Summary Of The Invention, for present purposes, is the "product" part:

> [The apparatus will] form a plastic washing machine basket having an annular sidewall extending upward from a peripheral portion of a base wall wherein the sidewall will have inner and outer surfaces with spaced apertures extending therethrough and teardrop-shaped grooves extending from the apertures.

Id.

Figures 1 and 2 of the '909 patent, reproduced below, show the plastic washing machine basket in question:[3]

[3]These figures are shown here in the same orientation in which they appear in the '909 patent, although they appear on separate sheets of the patent, rather than side-by-side.

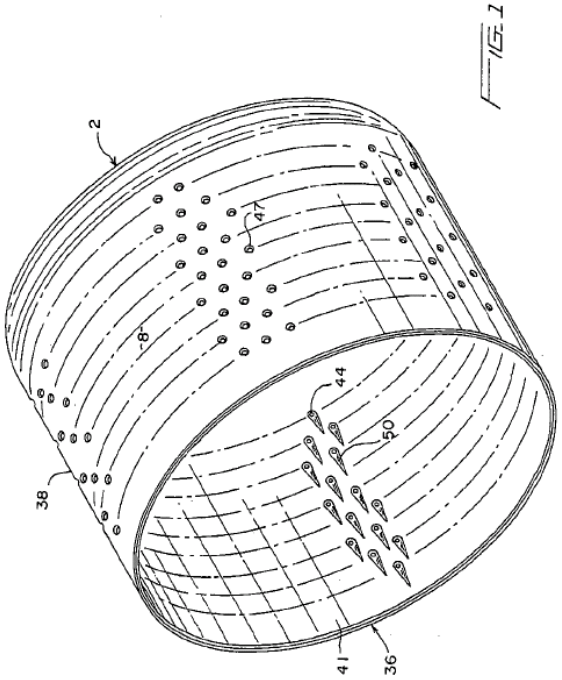


FIG. 1

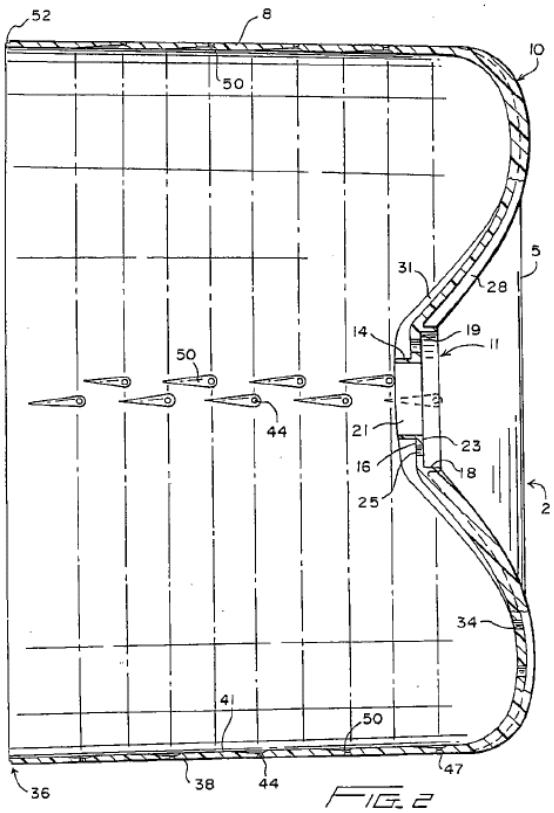


FIG. 2

The pertinent part of the Detailed Description Of The Invention in the '909 patent, that is, the part describing the plastic washing machine basket rather than the apparatus for producing such a basket, states the following:

> The plastic washing machine basket **2** of the invention will be explained with reference to FIGS. **1** and **2**. Basket **2** includes a base wall **5** and an annular sidewall **8** extending from a peripheral portion **10** of base wall **5**. . . .
>
> . . . . Base wall **5** is also formed with a plurality of drain holes **34** which extend through inner and outer surfaces **16**, **19** of base wall **5**.

> As previously stated, annular sidewall **8** extends from peripheral portion **10** of base wall **5** to a terminal edge **36**. Sidewall **8** is defined by an outside surface **38** and an inside surface **41** through which a plurality of apertures **44** extend. Apertures **44** are spaced along the length of sidewall **8** in alternating rows, as generally depicted in both FIGS. **1** and **2**. For the sake of clarity in these figures, apertures **44** have not been shown to extend entirely around the circumference of sidewall **8**. However, in the preferred embodiment, apertures **44** are provided around the entire circumference of sidewall **8** and are slightly and progressively reduced in diameter from adjacent base wall **5** toward terminal edge **36**. At outside surface **38**, apertures **44** are beveled at **47**. In addition, inside surface **41** of sidewall **8** is formed with teardrop-shaped grooves **50** which extend about apertures **44**. Teardrop-shaped grooves **50** generally taper along their length, in both width and depth, from base wall **5** toward terminal edge **36** such that apertures **44** are located in substantially the widest and deepest portions of teardrop-shaped grooves **50**. Finally, terminal edge **36** of sidewall **8** is provided with an outer annular notch **52** for the reasons which will be more fully discussed below.

The '909 patent (Detailed Description Of The Invention), col. 2, *l.* 43, to col. 3, *l.* 26.

The '909 patent states twenty-nine claims. However, Maytag has clarified that it is alleging that Electrolux's accused devices infringe only Claims 23, 24, 25, and 27. Electrolux asserts that Claim 26 is in dispute for purposes of its counterclaims. Therefore, the court will only quote here claims 23 through 27 of the '909 patent. Those claims state the following:

> **23**. A plastic washing machine basket comprising:
> a substantially circular base wall having a peripheral portion; and
> an annular plastic sidewall extending upward from the peripheral portion of said base wall to a terminal edge, said sidewall having inner and outer

surfaces, grooves formed in said inner surface of said sidewall, a plurality of spaced apertures extending through said sidewall, said apertures located within said grooves.

24. The plastic washing machine basket of claim **23**, wherein the outer surface of said sidewall is beveled about said apertures.

25. A plastic washing machine basket comprising:

a base wall having a peripheral portion, said base wall being formed of plastic; and

an annular sidewall extending upward from the peripheral portion of the base wall and diverging radially outwardly to an upper terminal edge, said sidewall including inner and outer surfaces having spaced apertures extending therethrough with the outer surface being beveled at the apertures, said sidewall being made of plastic and integrally formed with both the base and the apertures such that the basket has a smooth, uniform construction.

26. The plastic washing machine basket of claim **25**, wherein the basket lacks knit lines on the inner surface.

27. The plastic washing machine basket of claim **25**, wherein the basket lacks burrs at the apertures.

The '909 patent, col. 10, *ll*. 4-32.

3. The '809 patent

The focus of the '809 patent is the process for manufacturing a plastic washing machine basket, rather than the plastic washing machine basket itself. Therefore, the pertinent part of the Summary Of The Invention is the "process" part:

> These [identified objects of the invention] and other objects of the present invention are accomplished by providing a molding apparatus comprising a mold core which is fixed at one end and includes teardrop-shaped projections spaced about an outer periphery thereof, a plurality of cavity sidewall

> members being movable between an open mold position, in which the cavity sidewall members have been shifted at a predetermined angle away from the mold core, and a closed mold position, in which the cavity sidewall members extend about the outer periphery of the mold core with a first predetermined space therebetween, and a cavity cover member extending about the second end of the mold core with a second predetermined space therebetween and abutting the cavity sidewall members when in a closed mold position but being spaced from the cavity sidewall members when in an open mold position. The cavity sidewall members carry core pins having terminal ends which project toward and abut the teardrop-shaped projections of the mold core when the cavity sidewall members are in the closed mold position.
>
> By this arrangement, when a plastic material is injected into the first and second predetermined spaces, the plastic material will flow about the core pins and the projections so as to form a plastic washing machine basket having an annular sidewall extending upward from a peripheral portion of a base wall wherein the sidewall will have inner and outer surfaces with spaced apertures extending therethrough and teardrop-shaped grooves extending from the apertures. After cooling of the plastic material, the various core pins are used to remove the molded plastic washing machine basket from the mold core during an ejection process by shifting the basket relative to the mold core through the interengagement of the core pins with the apertures formed in the sidewall of the basket. A stripper ring and an ejection system, are also provided to aid in removing the molded basket from the mold core.

The '809 patent, col. 1, *l.* 56, to col. 2, *l.* 23.

Figures 3 and 4 of the '809 patent, reproduced below, show the molding apparatus in question:[4]

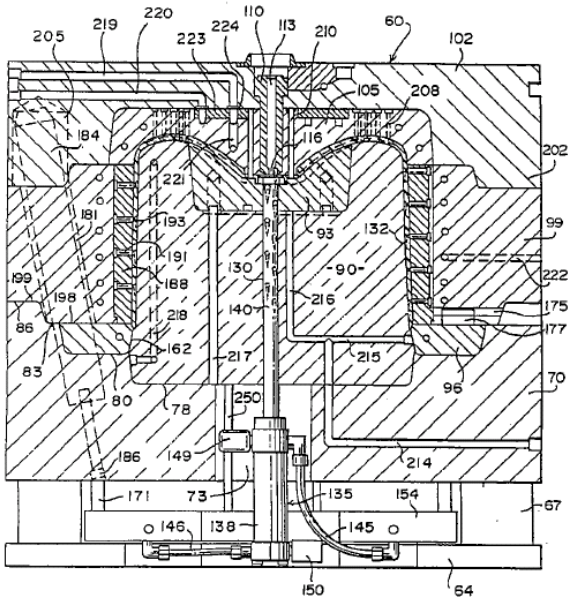


FIG. 3

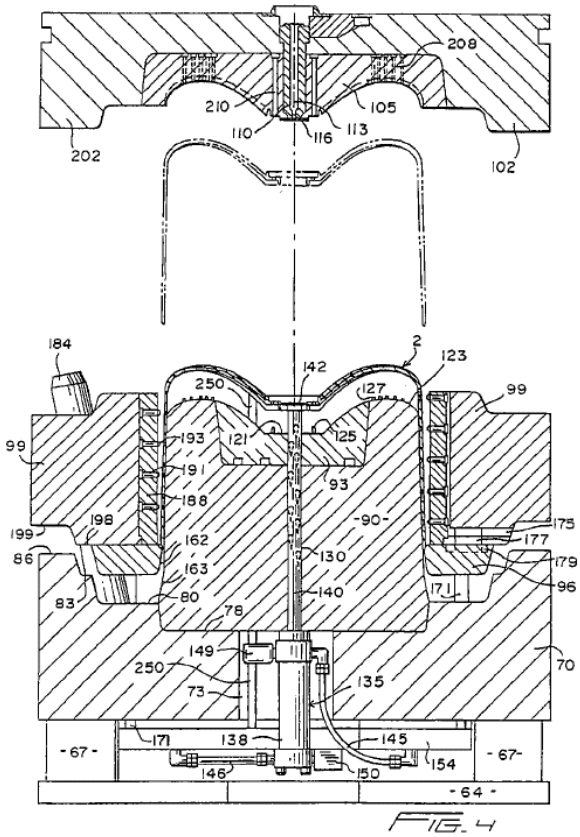
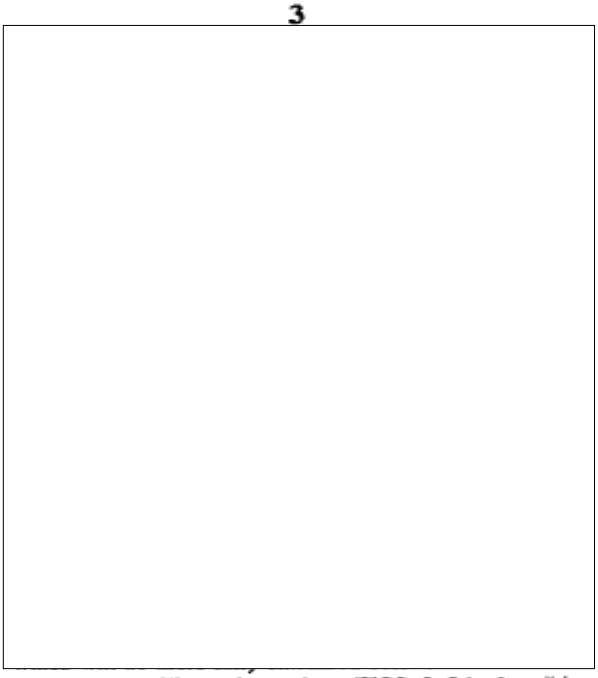


FIG. 4

[4]These figures are shown here in the same orientation in which they appear in the '909 patent, although they appear on separate sheets of the patent, rather than side-by-side.

The pertinent part of the Detailed Description Of The Invention in the ‘809 patent, that is, the part describing the apparatus for producing a plastic washing machine basket rather than the plastic washing machine basket itself, states the following:



Reference will now be made to FIGS. 3–5 in describing an apparatus 60 for molding plastic washing machine basket 2. Apparatus 60 comprises a mounting plate 64 to which a plurality of support rails 67 are secured. A core support block 70 having a central throughhole 73 is fixedly mounted to support rails 67. The upper portion of core support block 70 includes a base surface 78, a lower plateau 80, an intermediate plateau 83 and an upper plateau 86. A mold core 90 is secured to base surface 78 of core support block 70. Mold core 90 includes a core insert 93. The molding apparatus 60 further includes a stripper ring 96 which rests upon lower plateau 80 of core support block 70, a plurality of cavity sidewall members 99 which extend about the periphery of mold core 90 with a first space therebetween and a cavity cover member 102, which has secured thereto a cover insert 105, extending about an end of mold core 90 with a second space therebetween and abutting cavity sidewall members 99 when in a closed mold position. Cavity cover member 102 and cover insert 105 include an aligned throughhole (not labeled) within which an injection tube 110 is secured. Injection tube 110 includes an injection passage 113 which terminates in a nozzle 116 for introducing a flow of plastic material within the spaces between mold core 90 and both cavity cover member 102 and cavity sidewall members 99. The particular structure and interrelationship of the elements which comprise molding apparatus 60 as briefly discussed above will now be individually described in detail below.

Mold core 90 includes a trough portion 121 (see FIG. 4) and a crest portion 123. Mold core 90 is formed with a plurality of pins 125 which extend from trough portion 121 and a plurality of pins 127 which extend from crest portion 123. Mold core 90 is further provided with a central bore 130 and a plurality of teardrop-shaped projections 132 which are spaced substantially about the entire outer periphery of mold core 90. Teardrop-shaped projections 132 define the length, width and depth of teardrop-shaped grooves 50 in plastic washing machine basket 2 discussed above.

Located in central through hole 73 is a hydraulic actuator 135 comprising a cylinder 138 and an ejector rod 140 which extends through bore 130 and terminates in a plate 142. Although not detailed in the drawings, hydraulic actuator 135 is constructed in a manner known in the art wherein ejector rod 140 carries a piston at the end opposite terminal plate 142 such that the piston can move within cylinder 138 and defines upper and lower chambers on opposite sides thereof. A first hydraulic line 145 extends into the upper chamber in hydraulic actuator 135 while a second hydraulic line 146 extends into the lower chamber. By adjusting the supply of hydraulic fluid through first and second hydraulic lines 145 and 146, ejector rod 140 can be extended or retracted relative to cylinder 138. Upper and lower limit switches 149 and 150 are provided to indicate upper and lower displacement limits for the piston within cylinder 138. In the preferred embodiment, cylinder 138 of hydraulic actuator 135 is secured to a plate 154 which is movable between lower and upper limits as represented in FIGS. 3 and 4 respectively. The movement of plate 154 will be more fully discussed below.

Stripper ring 96 includes a tapered inner wall 162 which is adapted to conform to and seal against a tapered outer surface 163 of mold core 90 when molding apparatus 60 is in the closed mold position depicted in FIG. 3. Stripper ring 96 is adapted to be shifted between the position shown in FIG. 3 to that shown in FIG. 4 so as to aid in ejecting plastic washing machine basket 2 from molding apparatus 60. In order to shift the stripper ring 96, a plurality of rods 171 are fixedly secured between stripper ring 96 and movable plate 154 such that when movable plate 154 is shifted from the position shown in FIG. 3 to the position shown in FIG. 4 by any means known in the art (not shown), stripper ring 96 will be lifted from lower plateau 80 of support block 70.

As previously stated, cavity sidewall members 99 extend about the periphery of core 90 and are mounted upon stripper ring 96. In the preferred embodiment, as best shown in FIG. 5, four such cavity sidewall members 99 are utilized. Adjacent stripper ring 96, each cavity sidewall member 99 is provided with a groove 175 within which a guide pin 177, secured to stripper ring 96 by means of a plate 179, extends. Grooves 175 extend laterally within cavity sidewall members 99, as shown in FIGS. 3 and 4. In the preferred embodiment, both the guide pins 177 and grooves 175 are formed from a wear resistant and low friction material so as to permit cavity sidewall members 99 to slide relative to stripper ring 96 in a laterally outward direction as shown in FIGS. 3 and 4. Molding apparatus 60 further includes a means to automatically shift and guide cavity sidewall members 99 relative to stripper ring 96 upon lifting of stripper ring 96 from lower plateau 80. This guide arrangement not only includes grooves 175 and guide pins 177 but further includes angled bores 181 (see FIG. 3) extending through cavity sidewall members 99 within which are received guide rods 184 secured to core support block 70 at 186. Therefore, by this arrangement, when stripper ring 96 is lifted from the position shown in FIG. 3 to the position shown in FIG. 4, cavity sidewall members 99 will also be lifted and will be forced to shift laterally outwardly due to the presence of guide rods 184 in angled bores 181.

Each cavity sidewall member 99 further includes an inner plate 188 fixedly secured thereto. Inner plate 188 carries numerous spaced core pins 191 (540 core pins being utilized in the preferred embodiment of the invention). Core pins 191 include beveled tips 193 each of which is adapted to engage a corresponding teardrop-shaped projection 132 formed about the periphery of mold core 90 when molding appa-

ratus 60 is in its closed mold position. In the closed mold position, a lower tier 198 of the cavity sidewall members 99 rests upon stripper ring 96 and intermediate plateau 83 of core support block 70 while an upper tier 199 of cavity sidewall members 99 rests upon upper plateau 86 of core support block 70.

A more detailed description of cavity cover member 102 will now be provided. Cavity cover member 102 includes an annular flange portion 202 which is adapted to abut cavity sidewall members 99 when molding apparatus 60 is in the closed mold position as shown in FIG. 3 and which is spaced from cavity sidewall members 99 when molding apparatus 60 is in an open mold position as depicted in FIG. 4. It should be readily recognized that molding apparatus 60 can be changed between its open and closed mold positions by linearly shifting either cavity cover member 102 relative to mold core 90 or vice versa by any means known in the art (not shown) such as hydraulic or pneumatic linear actuators while shifting the cavity sidewall members 99 away from mold core 90 at a predetermined angle as discussed above. In the preferred embodiment, mold core 90 is shifted relative to cavity cover member 102. In the closed mold position, bores 205 formed in cavity cover member 102 extend about guide rods 184 to substantially close molding apparatus 60 and prevent shifting of cavity sidewall members 99. Cover insert 105 of cavity cover member 102 includes numerous pins 208 which are adapted to abut respective pins 127 formed on crest portion 123 of mold core 90 along with hollow pins 210 for receiving pins 125 on trough portion 121 when molding apparatus 60 is in the closed mold position.

The particular manner in which molding apparatus 60 is used to form plastic washing machine basket 2 along with the unique method of removing plastic washing machine basket 2 from mold core 90 will now be explained. As previously stated, molding apparatus 60 is depicted in a closed mold position in FIG. 3. In this position, a plastic material may be injected through passage 113 and nozzle 116 into the spaced defined between mold core 90 and both cover insert 105 of cavity cover member 102 and cavity sidewall members 99. The interconnection between pins 127, 208 and 125, 210 respectively will prevent the plastic material from flowing into these areas to form mounting holes 25 and drain holes 34 in basket 2. The plastic material will then continue to flow over crest portion 123 of mold core 90 and between mold core 90 and cavity sidewall members 99. At this point, the plastic material will flow about the beveled tips 193 of core pins 191, which extend substantially perpendicular to the longitudinal axis of mold core 90, and the teardrop-shaped projections 132 in order to form beveled apertures 44 and the teardrop-shaped grooves 50 in basket 2. It is important to note that the teardrop-shaped projections 132 permit the plastic material to flow around core pins 191 without creating knit lines which would inherently be formed without the presence of the teardrop-shaped projections 132, and thereby basket 2 can be formed with a smooth inner surface 41.

Once the flow of plastic material is cut off, the plastic material is given a sufficient amount of time to cool. Cooling of the plastic material along with molding apparatus 60 is preferably enhanced by providing various cooling lines 214–222 which extend throughout molding apparatus 60 in a manner known in the art. Various attachment plates, such as that indicated at 223, may be utilized to interconnect various tubes and passages between, for example, cavity cover member 102 and cover insert 105 and mold core 90 and mold insert 93 with O-rings 224 therebetween. As the use of such cooling lines and attachment methods therefor

are widely known in the art and not considered part of the present invention, these will not be further described herein.

Molding of basket 2 with a smooth inner surface 41 creates a problem in removing basket 2 since the basket 2 will tend to adhere to the outer peripheral surface of mold core 90. The use of an injection rod and a stripper ring to remove a molded article from a mold core is known in the art. However, these two elements alone could not sufficiently remove basket 2 from mold core 90 without severely damaging basket 2. To remedy this problem, during the initial ejection phase of basket 2, cavity cover member 102 is shifted away from cavity sidewall members 99 such that bores 205 are separated from guide rods 184. Stripper ring 96, which engages notch 52 provided about the terminal edge 36 of basket 2, is shifted upward by means of rods 171. Since cavity sidewall members 99 are supported upon stripper 96, cavity sidewall members 99 will also be shifted relative to mold core 90. As previously stated, the position of cavity sidewall members 99 relative to mold core 90 during shifting of stripper ring 96 is determined based on the particular guiding arrangement provided. More specifically, as stripper ring 96 is lifted off lower plateau 80, cavity sidewall members 99 will be lifted and shifted laterally relative to mold core 90. During the initial lifting of stripper ring 96, each of the core pins 191 will be engaged within a respective aperture 44 of basket 2 to provide a lifting force about the entire periphery of mold core 90. This lifting force is aided by both the ejection rod 140 and stripper ring 96 and enables basket 2 to be removed from mold core 90 without being damaged. Air lines (not shown), along with additional ejector rods 250 (see FIGS. 3–5) which are secured to movable plate 154, extend through core 90 and are adapted to engage basket 2, may also be provided to further aid the ejection process. By the time basket 2 has reached the ejection position shown in FIG. 4, the cavity sidewall members 99 have been laterally shifted a distance sufficient to completely remove the beveled tips 193 of core pins 191 from apertures 44. The outer peripheral surface of core mold 90 diverges slightly inwardly from bottom to top as shown FIGS. 3 and 4 such that when basket 2 reaches the position shown in FIG. 4, it can be freely removed from mold core 90 by extending ejector rod 140 relative to cylinder housing 138 so as to be located above mold core 90, at which point basket 2 can be readily removed by means of a robot arm or other transport system. It should be noted that basket 2 will be formed with a thin layer of plastic (not shown) extending across central through hole 21 which is later removed. It is this thin layer of plastic that terminal plate 142 of ejector rod 140 engages.

Locating core pins 191 at the thickest or crown portion of teardrop-shaped projections 132 and providing bevel tips 193 permit core pins 191 to be removed from apertures 44 without marring inner surface 41 of basket 2. The use of a solid mold core 90 prevents forming sectional lines inside basket 2, a result which could not be realized if a sectional mold core was utilized. As previously stated, the core pins 191 are arranged in a spaced and alternate fashion such that the plastic material is permitted to flow around tips 193 and teardrop-shaped projections 132 in a streamlined manner to thereby substantially eliminate the formation of knit lines. The shape of the teardrop-shaped projections 132 not only provides for the effective flow of the plastic material, but also forms the teardrop-shaped grooves 50 which improve washability by increasing the coupling of water and clothing inserted into basket 2. In addition, since holes 44 are recessed within the teardrop-shaped grooves 50, any edges on the holes 44 will be prevented from snagging clothes placed in basket 2.

The '809 patent states thirty-five claims. However, Maytag has clarified that it is alleging that Electrolux's accused devices infringe only Claims 7, 8, and 9. The court will, therefore, quote only those claims. Those claims state the following:

> **7**. A method of making an integral, smooth and uniformly constructed plastic washing machine basket having a base wall including a peripheral portion from which extends an annular sidewall that diverges radially outwardly to a terminal edge in an apparatus including a mold core, cavity sidewall members spaced about the mold core which carry core pins each having a beveled tip portion adapted to abut the mold core during a molding operation and a cavity cover member spaced about an end of the mold core and abutting the cavity sidewall members so as to define a cavity between the mold core and both the cavity cover member and the cavity sidewall members comprising:
>
> injecting a plastic material to fill the cavity while flowing around the beveled tip portion of each of the core pins to form a plastic washing machine basket having sidewalls provided with a plurality of spaced beveled apertures; and
>
> ejecting the washing machine basket from the apparatus by separating the mold core and cavity cover member and shifting the cavity sidewall members away from the mold core.
>
> **8**. The method of claim **7**, further comprising: utilizing the core pins to aid in ejecting the plastic washing machine basket from the apparatus with the core pins forcing the plastic washing machine basket to shift relative to the mold core as the cavity sidewall members are shifted away from the mold core due to the engagement of the core pins in the beveled apertures of the plastic washing machine basket.
>
> **9**. The method of claim **8**, further comprising: aiding in ejecting the washing machine basket by substantially, linearly shifting a stripper ring, that engages the terminal edge

of the plastic washing machine basket, relative to the mold core.

The '809 patent, col. 8, *ll*. 16-48.

C. Agreed Constructions

In their Corrected Joint Claim Construction Statement, filed September 22, 2005 (docket no. 67), the parties state that they have been able to agree on the construction of six terms. The six terms and the parties' agreed definitions are the following:

	CLAIM TERM	AGREED DEFINITION
1.	annular	shaped like a ring
2.	apertures	openings
3.	plurality of spaced apertures	two or more openings spaced apart from one another
4.	apertures located within said grooves	openings located in the grooves
5.	beveled	angled, sloped, or slanted
6.	lacks	without

D. Constructions Allegedly "In Dispute"

Maytag contends that only seven other claim terms require construction, because only those seven claim terms are actually "in dispute" with respect to Maytag's infringement claims. Electrolux counters that nineteen claim terms remain "in dispute," for purposes of both Maytag's infringement claims and Electrolux's invalidity defenses. The claim terms for which the parties have submitted definitions in the Corrected Joint Claim Construction Statement, filed September 22, 2005 (docket no. 67) are set forth in

the chart below, with each party's proffered definitions and the evidence on which each party relies. The seven terms that Maytag contends are the only terms that the court should construe are highlighted in gray. Bold font indicates differences in language between the parties' definitions.

THE '909 (PRODUCT) PATENT					
Claim Term		**Maytag's Definition**	**Maytag's Authority**	**Electrolux's Definition**	**Electrolux's Authority**
Claim 23					
a.	base wall	"the **wall opposite the access opening** of the washing machine basket"	'909 patent, Fig. 2; col. 2, ll. 3-7; col. 2, ll. 43—col. 3, l 4	"the **bottom wall** of the washing machine basket"	*See* '909 Patent at Fig. No. 2, No. 5; col. 2, lines 44-46 and 62-65.
b.	plastic sidewall	"a wall made of plastic that forms the side of the washing machine basket"	'909 patent, col. 2, ll. 3-7; col. 2, ll. 43-46; col. 3, ll. 5-16; Figs. 1 & 2; claims 23 & 25	"a plastic wall, **defined by inner and outer surfaces**, that forms the side of the washing machine basket"	*See* '909 Patent at Fig. 2, No. 8; Fig. 3; col. 2, lines 6-8; col. 3, lines 7-8.
c.	peripheral portion of said base wall	"a **portion of the base wall located away from the center** of the base wall"	'909 patent, Fig. 2; col. 2, ll. 3-8; col. 2, ll.44-46; col. 2, ll. 62-65; col. 3, ll. 5-6; dictionary definition of "peripheral"	"**outside edge of the bottom wall** of the washing machine basket"	*See* '909 Patent at Fig. 2, No. 10; col. 2, lines 5-10 and lines 44-46; col. 3, lines 4-5; dictionary definitions of "peripheral"
d.	inner surface **[no arguments in initial briefs]**	"the inside surface **of the basket**"	'909 patent, Figs. 1 & 2; col. 2, ll. 3-10; col. 2, ll. 46-50; col. 3, ll. 1-20	"interior/inside surface **of the sidewall of the plastic washing machine basket**"	*See* '909 Patent at Fig. 1, No. 41; Fig. 2, No. 41; col. 3, lines 7-8.
e.	outer surface **[no arguments in initial briefs]**	"the outside surface **of the basket**"	'909 patent, Figs. 1 & 2; col. 2, ll. 3-10; col. 2, ll. 54-57; col. 2, ll. 62-65; col. 3, ll. 6-17	"exterior/outside surface **of the sidewall of the plastic washing machine basket**"	*See* '909 Patent at Fig. 1, No. 38; Fig. 2, No. 38; col. 3, lines 7-8.

THE '909 (PRODUCT) PATENT					
Claim Term		**Maytag's Definition**	**Maytag's Authority**	**Electrolux's Definition**	**Electrolux's Authority**
Claim 23 (cont'd)					
f.	groove	"a **narrow** depression, channel or trough **in a surface**"	'909 patent, col. 2, ll. 3-10; col. 3, ll. 17-23; col. 3, ll. 61-64; col. 4, ll. 36-53; col. 5, ll. 43-56; col. 6, ll. 60-67; claims 1, 28 and 29; dictionary definition of "groove"	"a depression, channel or trough **in the sidewall surface of the basket formed by a corresponding projection on the mold core**"	*See* '909 Patent, col. 3, lines 17-19 and lines 59-64; col. 5, lines 43-48; col. 6, lines 60-64.
g.	formed in said inner surface of said sidewall	"formed **as part of** the inside surface of the sidewall"	'909 patent, col. 2, ll. 3-10; col. 3, ll. 17-23; col. 3, ll. 61-64; col. 4, ll. 36-53; col. 5, ll. 43-56; col. 6, ll. 60-67	"formed **in** the inside surface of the **plastic washing machine basket** sidewall"	*See* '909 Patent at col. 3, lines 17-20.
Claim 25					
a.	Annular sidewall . . . diverging radially outwardly to an upper terminal edge	"a sidewall **formed like a ring and having a radius measured from the vertical center axis *to the sidewall* that increases moving from the base wall to the edge of the access opening of the sidewall**"	'909 patent, Fig. 2 and 4; col. 4, ll. 19-22; col. 4, ll. 32-34; col. 6, ll. 37-39; claims 11, 12 and 18; dictionary definitions of "diverging" and "radial"	"**the structure of** the sidewall **is disposed from a central axis a greater distance at the top edge than at the bottom**"	*See* '909 Patent at Fig. 2 (radially outwardly); Fig. 3; dictionary definitions of "radially"

THE '909 (PRODUCT) PATENT					
Claim Term		**Maytag's Definition**	**Maytag's Authority**	**Electrolux's Definition**	**Electrolux's Authority**
Claim 25 (cont'd)					
b.	terminal edge	"the **edge** of the side-wall **at the access opening**"	909 patent, Figs. 1 and 2; col. 3, ll. 13-16; col. 3, ll. 24-26.	"**top edge** of the sidewall"	*See* '909 Patent at Fig. 1, No. 36; Fig. 2, No. 36; col. 3, lines 5-6.
c.	integrally formed	"**elements** that are **formed together to make a single structure**"	'909 patent, claims 9, 12, 16, 18; Figs. 1, 2, 3 and 4; col. 2, ll. 3-10; col. 2, ll. 43-46; col. 5, ll. 28-56.; dictionary definition of "integral"	"**formed as one part"**	*See* '909 Patent at col. 6, lines 52-55; col. 1, lines 35-37 and lines 40-44; dictionary definitions of "integrally"
d.	smooth, uniform construction	This is a modifier of the preceding term "integrally formed" and must be considered jointly with the previous term, i.e., the basket has an "integrally formed, smooth uniform construction," and this means that "the basket **has a base wall that blends smoothly and uniformly into the sidewall**"	'909 patent, claims 9, 12, 16, 18; Figs. 1, 2, 3 and 4; col. 2, ll. 3-10; col. 2, ll. 43-46; col. 5, ll. 28-56.	"**washing machine** basket must **have a surface that is even in texture** and also having a **structure that is free from irregularities, roughness or projections**"	*See* '909 Patent at col. 1, lines 40-44; col. 5, lines 54-56; col. 6, lines 3-6, and lines 52 -55.

THE '909 (PRODUCT) PATENT					
Claim Term		**Maytag's Definition**	**Maytag's Authority**	**Electrolux's Definition**	**Electrolux's Authority**
Claim 26					
a.	knit lines **[identified as in dispute by Maytag, but not argued in Maytag's first brief]**	"a line that **visually indicates a defect** on a molded plastic article **caused by the meeting of two flow fronts during the molding operation"**	'909 patent, col. 1, ll. 24-25; col. 1, ll. 33-50; specialized dictionary definition of "weld mark"	"lines that **may or may not be visible** to the human eye **that form when the molten plastic flows around the core pins and then solidifies**"	*See* '909 Patent at col. 1, lines 22- 25; col. 5, lines 48-56; col. 6, lines 55-59; ProtoMold website
Claim 27					
a.	burrs at the apertures	"a **rough, sharp or jagged edge or area** remaining on the **inner surface** of the sidewall after holes have been **formed by perforating, cutting or drilling**"	'909 patent, col. 1, ll. 26-33; col. 6, ll. 64-67; dictionary definition of "burr"	"**irregularities, roughness or projections**, where the apertures are **formed**, on the **inner or outer surface** of the sidewall of the plastic washing machine basket"	*See* '909 Patent at col. 1, line 29; col. 6, lines 64 - 66; dictionary definition of "burr"

THE '809 (PROCESS) PATENT					
Claim Term		**Maytag's Definition**	**Maytag's Authority**	**Electrolux's Definition**	**Electrolux's Authority**
Claim 7					
a.	a base wall including a peripheral portion from which extends an annular sidewall *that diverges radially outwardly* to a terminal edge	"A base wall including a peripheral portion from which extends an annular sidewall **having a radius measured from the vertical center axis to the sidewall that increases from the base wall to the terminal edge**"	'809 patent, Fig. 2; col. 2, ll. 8-15; col. 4, ll. 22- 25; col. 6, ll. 3-44; claims 24, 29 and 34; '909 patent claims 11, 12, and 18; dictionary definitions of "diverge" and "radial"	"the bottom wall of the washing machine basket is the base wall; the peripheral portion of the base wall is the outside edge of the bottom wall of the washing machine basket; the sidewall of the washing machine basket is **disposed from a central axis a greater degree at the top edge than at the bottom; the terminal edge is the top edge of the sidewall**"	*See* '809 Patent at Fig. No. 2, No. 5 (base wall); Fig. 2, No. 10 (peripheral portion); Fig. 2, No. 8 (sidewall); Fig. 2 (radially outwardly); Fig. 1, No. 36 and Fig. 2, No. 36 (terminal edge); col. 2, lines 9-15 and lines 48-50; col. 3, lines 8-9, lines; col. 6, lines 36-42; dictionary definitions of "radial"
b.	mold core **[no arguments in initial briefs]**	"the part of the mold about which plastic flows to form the inner surface of the washing machine basket"	'809 patent, Figs. 3 & 4; col. 1, l. 56—col. 2, l. 23; col. 3, ll. 9-67; col. 5, ll. 36-54; col. 6, ll. 3-6; claims 1, 4, 10, 11, 20, 24, 25, 29, 30, 34; Abstract.	"the part of the molding machinery around which molten plastic flows to form the washing machine basket"	*See* '809 Patent at Fig. 3, No. 90; Fig. 4, No. 90; col. 5, lines 36-39 42-46; *see also* col. 3, lines 37-47 and lines 58-65.

THE '809 (PROCESS) PATENT					
Claim Term		**Maytag's Definition**	**Maytag's Authority**	**Electrolux's Definition**	**Electrolux's Authority**
Claim 7 (cont'd)					
c.	cavity sidewall members spaced about the mold core **[no arguments in initial briefs]**	"the parts of the mold that surround the side of the mold core to form the outer surface of the sidewall of the washing machine basket"	'809 patent, Figs. 3, 4 and 5; col. 1, l. 56—col. 2, l. 15; col. 3, ll. 30-57; col. 4, l. 35—col. 5, l. 6; col. 5, ll. 36-46; dictionary definition of "spaced"	"the outer sections of the molding machinery that surround the mold core to form the cavity into which plastic is injected to form the washing machine basket"	*See* '809 Patent at Fig. 5, No. 99; col. 3, lines 40-47; col. 4, lines 35-38
d.	core pins each having a beveled tipped portion	"**pins that form the holes** in the sidewall **and have a beveled end portion**"	'809 patent, Figs. 3 & 4; col. 4, l. 61—col. 5, l. 6; col. 5, ll. 46-51; col. 6, ll. 49-52; dictionary definition of "portion"	"**pins that are used to form apertures (holes)** in the washing machine basket; **the pins have a slanted or sloped tip**"	*See* '809 Patent at Fig. 3, No. 193; Fig. 4, No. 193; col. 5, Line 45; col. 4, lines 64-67; col. 5, lines 47- 51.
e.	cavity cover member spaced about an end of the mold core	"a **section** of the mold **extending about and spaced from an end of the mold core**"	'809 patent, Figs. 3 & 4; col. 3, ll. 3-57; col. 5, ll. 7-30; col. 5, ll. 25-30 col. 5, ll. 36-40; Abstract; claims 1, 7, and 11.	"a **cover** that is **adapted to abut the cavity sidewall members when** the molding apparatus is in a **closed** mold position and which is **spaced from the cavity sidewall members when** the molding apparatus is in an **open** mold position"	*See* '809 Patent at Fig. 3, No. 102; Fig. 4, No. 102; col. 5, lines 8-13.
f.	abutting the cavity sidewall members	"**the cavity cover member touches** the sidewall members"	'809 patent, Figs. 3 & 4; col. 3, ll. 44-47; col. 5, ll. 7-13; col. 5, ll. 36-40.	"**touching** the sidewall members"	*See* '809 Patent at col. 5, lines 8-13; dictionary definitions of "abutting"

THE '809 (PROCESS) PATENT					
Claim Term		**Maytag's Definition**	**Maytag's Authority**	**Electrolux's Definition**	**Electrolux's Authority**
Claim 7 (cont'd)					
g.	"ejecting the washing machine basket . . . by separating the mold core and cavity cover member and shifting the cavity sidewall member away from the mold core"	"**preparing** the formed plastic washing machine basket **for removal** from the mold **by performing steps including at least separating the mold core and the cavity cover member and moving the cavity sidewall member away from the mold core**"	'809 patent, col. 6, ll. 3-48; claims 8 & 9; col. 2, ll. 15-23.	"**removing** the formed plastic washing machine basket from the mold **core by the operation of moving the cavity cover member away from the mold core and shifting the sidewall members**"[5]	*See* '809 Patent at col. 6, lines 3-13 and lines 17-23.
h.	spaced about an end of the mold core	[no definition offered]		"extending about an end of the mold core to define a space between the cavity cover member and the end of the mold core"	*See,* Figs 3 and 4; Col 3, lines 39 – 47.

[5]This is the statement of Electrolux's construction of this claim term in its initial *Markman* brief. *See* Defendant Electrolux Home Products, Inc.'s [sic] Brief On Claim Construction (docket no. 70), 31. Electrolux's construction of this term in the Corrected Joint Claim Construction Statement (docket no. 67) at 22, was the following: "removing the formed plastic washing machine basket from the mold core by the operation of moving the *cavity core members* away from the mold core." The court assumes that the construction in the Corrected Joint Claim Construction Statement included the italicized language as the result of a typographical error.

THE '809 (PROCESS) PATENT					
Claim Term		**Maytag's Definition**	**Maytag's Authority**	**Electrolux's Definition**	**Electrolux's Authority**
Claim 8					
a.	utilizing the core pins to aid in ejecting	"using the core pins **to assist in shifting or moving** the plastic washing machine basket **relative to the mold core**"	'809 patent, col. 6, ll. 6-44; claim 8.	"using the core pins **to actively assist in removing** the formed plastic washing machine basket **from the mold core**"	*See* '809 Patent at col. 2, lines 16- 18; col. 6, lines 24-27; dictionary definitions of "utilizing"
b.	core pins forcing the plastic washing machine basket to shift relative to the mold core . . .	"the core pins **provide a lifting or axial force** to **shift or slightly move** the washing machine basket **about the mold core**"	'809 patent, col. 6, ll. 6-44; claim 8.	"the formed plastic washing machine basket is **separated from the mold core** by the operation of the core pins **when the cavity side wall members are shifted away from the mold core**"	*See* '809 Patent at col. 2, lines 16- 19; col. 6, lines 10-15 and lines 24- 27.

THE '809 (PROCESS) PATENT					
Claim Term		**Maytag's Definition**	**Maytag's Authority**	**Electrolux's Definition**	**Electrolux's Authority**
Claim 8 (cont'd)					
c.	Due to engagement of the core pins in the beveled apertures in the plastic washing machine basket	"**the force is applied because** the core pins are **initially touching** the beveled apertures in the plastic washing machine basket"	'809 patent, col. 6, ll. 6-44; claim 8.	"the core pins are in **contacting relationship with** the plastic basket within the apertures and **cause force to be exerted at each aperture to actively assist in removing the formed plastic washing machine basket from the mold core**"	*See* '809 Patent at col. 2, lines 16- 20; col. 6, lines 23-26; dictionary definitions of "engagement"
Claim 9					
a.	stripper ring **[no arguments in initial briefs]**	"a part of the mold at the base of the mold core that aids in the ejecting the washing machine basket from the mold"	'809 patent, Figs. 3 & 4; col. 2, ll. 21-23; col. 3, ll. 39-47; col. 4, ll. 22- 41; col. 6, ll. 5-44; claims 2 and 9.	"an apparatus at the base of the mold core that is, by the application of force, activated along the length of the mold core to push the formed plastic washing machine basket off the mold core"	*See* '809 Patent at col. 4, lines 22-34; col. 6, lines 13-29.

II. LEGAL ANALYSIS

A. The Terms To Be Construed

As indicated above, the parties' first dispute is what claims the court should construe. The court finds that the issue of what claim terms the court should actually construe requires some analysis.

1. What claim terms are "in dispute"?

a. Arguments of the parties

Maytag argues that the Federal Circuit Court of Appeals has made clear that only disputed terms need to be defined. Maytag then asserts that Electrolux disputes the presence in its accused devices of claim limitations involving only seven terms, but does not dispute that several other limitations involving terms for which Electrolux also demands construction are present in its accused devices. Thus, Maytag's initial argument is, in essence, that only claim terms pertinent to the parties' disputes about infringement require construction. Maytag contends that construing additional "undisputed" terms would result in the court rendering an advisory opinion and impinging upon the province of the jury to determine infringement issues.

In its portion of the Joint Claim Construction Statement and its initial and rebuttal *Markman* briefs, Electrolux asserts that Maytag's contention that the court should only construe terms necessary to determine issues of infringement is simply wrong. Electrolux argues, instead, that claim construction is intended to determine the meaning of claim terms in dispute for purposes of all of the issues being litigated, including infringement and invalidity issues. Indeed, Electrolux points out that claim terms must be given the same construction for purposes of both invalidity and infringement analyses. Electrolux also contends that the court's claim constructions will govern the applicability of prior art,

which, in turn, has an impact on invalidity. Electrolux contends that the court's duty to construe claims extends beyond terms formally disputed by the parties, because the court has a duty to instruct the jury as to the law governing patent infringement. Electrolux also argues that, in *Markman*, the Federal Circuit Court of Appeals and the Supreme Court rejected the contention that Maytag now makes that the court would somehow trespass upon the province of the jury, because the *Markman* decisions made clear that claim construction is a matter for the court.

In its final "surrebuttal" brief, and elsewhere, Maytag contends that Electrolux's repeated failure to identify the "validity" disputes as to which the construction of certain claim terms could be relevant confirms that there are really no such disputes. Therefore, Maytag reiterates that the court need only construe the seven terms in dispute for infringement purposes.

At the oral arguments, the parties focused this portion of their dispute exclusively on two terms: "knit lines" in Claim 26 of the '909 patent and "cavity cover member spaced about an end of the mold core" in Claim 7 of the '809 patent. Maytag had identified "knit lines" as a term in dispute in the Joint Claim Construction Statement, but then offered no argument concerning its proposed definition in its opening brief. Apparently this omission of argument was the result of Maytag's withdrawal of its initial contention that Electrolux's accused devices infringe Claim 26 of the '909 patent. However, Electrolux contended that a dispute about the construction of "knit lines" is as ripe as it could possibly be, because Electrolux has consistently maintained that the '909 patent is not "enabling" owing to the impossibility of making a washing machine basket without "knit lines." Maytag contends that "cavity cover member" is not in dispute, because Electrolux's representatives have agreed that their accused devices lack any such

component. Electrolux, however, contends that "cavity cover member" is in dispute, for infringement purposes, and has been so identified since February 2005.

b. Analysis

Maytag is correct that in *Vivid Technologies, Inc. v. American Science & Engineering, Inc.*, 200 F.3d 795 (Fed. Cir. 1999), the Federal Circuit Court of Appeals observed, "AS & E is correct that although the claims are construed objectively and without reference to the accused device, only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy." *Vivid Techs., Inc.*, 200 F.3d at 803 (citing *United States Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997), for the proposition that claim construction is for "resolution of disputed meanings"). However, that principle hardly limits claim construction to terms at issue in an infringement dispute. Rather, it makes clear that the issue is whether the terms are "in controversy," which in the context of patent law would necessarily include claims "in controversy" for purposes of a validity challenge, as well as terms "in controversy" for purposes of infringement claims. Indeed, the Federal Circuit Court of Appeals has made clear that claim construction is the first step in analysis of invalidity challenges, just as it is the first step in analysis of infringement allegations. *State Contracting & Eng'g Corp. v. Condotte Am., Inc.*, 346 F.3d 1057, 1068 (Fed. Cir. 2003) ("[W]e have held that a claim 'must be construed before determining its validity, just as it is first construed before deciding infringement.'") (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 997 n.7 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996)); *see also Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1316 (Fed. Cir. 2005) (reviewing claim constructions for purposes of both invalidity and infringement). Furthermore, the claim terms must be given the same construction for purposes of determining both infringement and invalidity. *See, e.g., Intervet Am., Inc. v. Kee-Vet*

Labs., Inc., 887 F.2d 1050, 1053 (Fed. Cir. 1989) ("We fully subscribe to the proposition that claims must be given the same construction when considering infringement as when considering validity."). Thus, if patent claim terms are "in dispute" for purposes of determining validity, the court has the same obligation to construe the claim terms as it would have if the claim terms are "in dispute" for purposes of determining infringement.

All of this goes by the wayside, however, if there are, in fact, no substantial allegations of invalidity of the patents-in-suit involving the claim terms that a party asks the court to construe. In such circumstances, the only claim terms requiring construction would be those "in dispute" for purposes of *infringement* claims. Maytag has identified the claim terms that it contends are "in dispute" for purposes of infringement from the parties' Claim Charts, which show, *inter alia*, which limitations Electrolux admits are included in Electrolux's accused devices and which ones Electrolux contends are not present. Electrolux does not disagree that these are the only terms "in dispute" for purposes of infringement. In contrast, Electrolux pleaded its affirmative defenses and counterclaims of invalidity of the patents-in-suit only in very general terms. *See* Answer (docket no. 10). Thus, Electrolux's affirmative defenses and counterclaims give no hint of what claim terms are at issue in any "invalidity" challenges to the patents-in-suit. Also, nowhere in its briefing for the *Markman* hearing has Electrolux identified *the basis* for its assertions that the construction of various claim terms is necessary to its "invalidity" arguments. The court was unwilling simply to take Electrolux's word for it that the claim terms Electrolux has identified *may be* at issue at some point in the future, for example, when the court or the jury makes obviousness, anticipation, or other "invalidity" determinations concerning the patents-in-suit in light of the prior art. To do so would, as Maytag contends, constitute an impermissible advisory opinion, because the court would construe terms to a greater extent than necessary to resolve the present controversy. *Vivid*

Techs., Inc., 200 F.3d at 803. However, at the *Markman* hearing, Electrolux clarified the basis for its contention that the construction of "knit lines" is genuinely in dispute for purposes of its invalidity challenge to the '909 patent, specifically, as part of its assertion that the '909 patent is not "enabling." Similarly, at the *Markman* hearing, Electrolux demonstrated to the court's satisfaction that it has, at least since February 2005, consistently identified "cavity cover member" in Claim 7 of the '809 patent as in dispute for infringement purposes.

Therefore, the court finds that, in addition to the seven terms identified by Maytag as "in dispute" for purposes of infringement, "knit lines" and "cavity cover member" are "ripe" for construction at this time, the first for purposes of invalidity and the second for purposes of infringement. Unfortunately, postponing construction of several additional terms until Electrolux demonstrates that they are actually "in dispute" for purposes of invalidity may mean that the court will have to engage in another round of *Markman*-like claim construction. Fortunately, it appears that the parties have already laid much of the ground work for such additional claim construction when and if the issue of the construction of additional terms becomes "ripe."

2. What disputed terms must be construed?

a. Arguments of the parties

Even where only these nine terms are considered to be "in dispute" at this time, Maytag has asserted that some terms simply require no construction. Specifically, in its briefing of its appeal of Judge Zoss's order requiring the parties to submit proposed claim constructions, Maytag first took the position that the court should not construe claim terms that are "unambiguous." *See* Plaintiff's Objections To United States Magistrate Judge Paul A. Zoss's May 31, 2005, Order (docket no. 48). Maytag asserted that all of the claim terms that are "in dispute" should be given their plain and ordinary meanings, and as such,

those terms required no further definition. "Construction" of such terms, Maytag contended, would introduce additional specificity that is not required and would take away from the jury questions of whether the accused devices meet the limitations expressed in the words of the claims. Maytag contended that such excessive construction is just using words to define words, allowing a departure from the meaning of the claim language to serve the purposes of a party disputing infringement. Maytag reiterates this argument in its *Markman* briefs. *See* Plaintiff's Pre-Hearing Brief on *Markman* Claim Construction Issues, filed September 30, 2005 (docket no. 71) at 6-10. Maytag asserts that construction of clear claim language confuses construction, which is a question of law for the court, with infringement, which is a question of fact for the jury. Maytag argues that it is improper to interpret claim terms to facilitate a comparison between the claim and the accused device. Although some imprecision in claim language is inevitable, Maytag contends that the court must not take away from the jury the ultimate determination of whether claims read on the accused device by engaging in claim construction that is excessively specific.

Electrolux counters that even words of ordinary usage may require construction when used in a patent. This is so, Electrolux contends, because terms in a patent are given their "ordinary meaning" as the terms would be understood *by a person of skill in the art*, citing, *inter alia*, this court's September 6, 2005, Order. Thus, Electrolux asserts that, before any infringement or invalidity determination can be made, the court must consult the patent language, the specification, and the prosecution history, and possibly extrinsic evidence, to determine the meaning of the words in the claims. It is not enough, Electrolux argues, to assert that certain claims appear simple and easy to understand, and thus, ought not to be construed by the court, because this argument acknowledges neither the context

of terms in the patent nor how they would be understood by one of skill in the art in that context.

b. Analysis

The court does not agree with Maytag's assertion that terms to be given their "ordinary meanings" do not require any construction. As the court stated in its September 6, 2005, Order, while terms not expressly defined in a patent are to be given their "ordinary meaning," it is their "ordinary meaning . . . *as understood by a person of skill in the art*." *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (*en banc*) (emphasis added). It has been this court's experience that parties in patent cases rarely agree on the "ordinary meaning [of patent terms] as understood by a person of skill in the art," so that asserting that such a meaning should apply, without further construction, merely begs the question of what that meaning is.

Moreover, determining what is the "ordinary meaning . . . as understood by a person of skill in the art" is part of the *process* of claim construction. *See id.*; *see also Nystrom v. TREX Co., Inc.*, 424 F.3d 1136, 1142 (Fed. Cir. 2005) (setting out the process for determining the "ordinary meaning" of claim terms pursuant to *Phillips*). As the Federal Circuit Court of Appeals explained in *Phillips*,

> In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words. *See Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001) (holding that the claims did "not require elaborate interpretation"). In such circumstances, general purpose dictionaries may be helpful. In many cases that give rise to litigation, however, determining the ordinary and customary meaning of the claim requires examination of terms that have a particular meaning in a field

> of art. Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean." *Innova*, 381 F.3d at 1116. Those sources include "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Id.*; *see also Gemstar-TV Guide Int'l, Inc. v. Int'l Trade Comm'n*, 383 F.3d 1352, 1364 (Fed. Cir. 2004); *Vitronics*, 90 F.3d at 1582-83; *Markman*, 52 F.3d at 979-80.

Phillips, 415 F.3d at 1314 (emphasis added). Thus, even if the meanings of the "disputed" terms are "readily apparent," determination of what "general purpose dictionar[y]" definitions are applicable in context may be helpful to determine the "ordinary meaning . . . *as understood by a person of skill in the art*." *Id.* (emphasis added). If the meanings of those terms are *not* "immediately apparent," the court must look further to determine proper definitions. *Id.* Thus, it is clear that even terms with meanings that are "readily apparent" may properly be construed by the court to determine their "ordinary meaning . . . as understood by a person of skill in the art."

Maytag is correct, however, that there are limits on the scope of "construction." As explained more fully below, the proper process of claim construction involves consideration of intrinsic evidence, consisting of the patent claims, the patent specification, and the prosecution history, and if necessary, extrinsic evidence, consisting of dictionary definitions and expert testimony. *See id.* at 1316-22. Claim construction does *not* involve comparison of the patent language to the accused device. *See, e.g., PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998) (the inevitable imprecision of patent claims "does not mean . . . that a court, under the rubric of claim construction,

may give a claim whatever additional precision or specificity is necessary to facilitate a comparison between the claim and the accused product"); *see generally Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996) (patent claim construction is a question of law for the court that is separate from determination of whether infringement has occurred). Thus, the task of the court is to "define[ ] the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction," and once that task is done, "the task of determining whether the construed claim reads on the accused product is for the finder of fact." *Id.* Nevertheless, while the court must be mindful that it is construing terms *in the context of the patent*, not construing terms *in the context of infringement arguments*, when the court recognizes and follows this principle, claim construction does not trespass on the province of the jury to determine infringement, even when the court construes terms that are to be given their "ordinary meanings."[6]

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[6]The court also believes that an additional issue is whether the court must *define for the jurors* terms that, while not in dispute, are terms for which the parties agree that the appropriate construction is the "ordinary meaning . . . *as understood by a person of skill in the art*." *Phillips*, 415 F.3d at 1314 (emphasis added). As this court observed in its Order of September 6, 2005 (docket no. 61), neither jurors nor most judges could reasonably be assumed to be "persons of skill in the art." If the meanings of the claim terms are "readily apparent," determination of what "general purpose dictionar[y]" definitions are applicable in context may be helpful *for jurors*; if the meanings of those terms are *not* "immediately apparent," the court must look further to determine proper definitions for purposes of jury instructions. *Phillips*, 415 F.3d at 1314. For example, the parties here have agreed that "annular" means "shaped like a ring," but it seems unlikely to the court that many jurors would ever have heard this word or would know what its "ordinary" definition is, let alone what its "ordinary meaning . . . as understood by a person of skill in the art" might be. The court will reserve for a later ruling the issues of if and how terms that are not, technically, "in dispute" should be defined for

(continued…)

Having determined what terms must be construed, the court turns, next, to the principles of patent claim construction.

B. Principles Of Patent Claim Construction

In construing patent claims, courts follow the methodology set forth in the recent *en banc* decision of the Federal Circuit Court of Appeals in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*). *CytoLogix Corp. v. Ventana Med. Sys., Inc.*, 424 F.3d 1168, 1172 (Fed. Cir. 2005); *Free Motion Fitness, Inc. v. Cybex Int'l, Inc.*, 423 F.3d 1343, 1347 (Fed. Cir. 2005). The court will, therefore, summarize that methodology and review key canons of patent claim construction.

1. The Phillips methodology

a. The starting point

As the court explained in *Phillips*, "[i]t is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Consequently, before and since the decision in *Phillips*, the Federal Circuit Court of Appeals has reiterated that courts must "begin [their] claim construction analysis with the words of the claim." *Nystrom v. TREX Co., Inc.*, 424 F.3d 1136, 1142 (Fed. Cir. 2005) (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 2004)); *Biagro Western Sales, Inc. v. Grow More, Inc.*, 423 F.3d 1296, 1302 (Fed. Cir. 2005) ("It is elementary that claim construction begins with, and remains focused on, the language of the claims."). "The construction of

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[6](…continued)
jurors.

claims," the Federal Circuit Court of Appeals has explained, "is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims." *Terlep v. Brinkman Corp.*, 418 F.3d 1379, 1382 (Fed. Cir. 2005) (internal quotation marks and citations omitted).

b. Hierarchy of evidence

As to the process of claim construction,

> The words of the claim are generally given their ordinary and customary meaning. [*Vitronics Corp.*, 90 F.3d] at 1582. The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips*, 415 F.3d at 1313. The person of ordinary skill in the art views the claim term in the light of the entire intrinsic record. *See id.* Thus, the claims "must be read in view of the specification, of which they are a part." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (*en banc*). "'The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.'" *Phillips*, 415 F.3d at 1316 (quoting *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)). In addition to the written description, "the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.* at 1317.

Nystrom, 424 F.3d at 1142; *Biagro Western Sales*, 423 F.3d at 1302 (explaining that "prosecution history, . . . like the patent itself, has been designated as part of the 'intrinsic evidence'" for claim construction) (quoting *Phillips*, 415 F.3d at 1317).

The Federal Circuit Court of Appeals has explained that the "central importance" of the specification of the patent in claim construction is "because 'the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.'" *Aquatex Indus., Inc. v. Techniche Solutions*, 419 F.3d 1374, 1380 (Fed. Cir. 2005) (quoting *Phillips*, 415 F.3d at 1313); *Research Plastics, Inc. v. Federal Packaging Corp.*, 421 F.3d 1290, 1295 (Fed. Cir. 2005) (" It is presumed that the person of ordinary skill in the art read the claim in the context of the entire patent, including the specification, not confining his understanding to the claim at issue."). Indeed, "[w]here . . . the disputed claim term is technical or a term of art, '[t]he best source for understanding [it] is the specification from which it arose, informed, as needed, by the prosecution history.'" *Aquatex*, 419 F.3d at 1380 (quoting *Phillips*, 415 F.3d at 1315). The specification is not only "highly relevant" to claim construction, "[u]sually, it is dispositive." *Phillips*, 415 F.3d at 1314 (adding that the specification "is the single best guide to the meaning of a disputed term").

Similarly, "'[t]he purpose of consulting the prosecution history in construing a claim is to "exclude any interpretation that was disclaimed during prosecution."'" *Research Plastics*, 421 F.3d at 1296 (quoting *Rhodia Chimie v. PPG Indus.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005), in turn quoting *ZMI Corp. v. Cardiac Resuscitator Corp.*, 844 F.2d 1576, 1580 (Fed. Cir. 1988)). This is so, because "the prosecution history can reveal instances where the inventor limited the invention in the course of prosecution and thus narrowed the scope of the claim." *Id.* (citing *Phillips*, 415 F.3d at 1317-18).

In addition to "intrinsic" evidence, consisting of the claim language, the specification, and the prosecution history, "extrinsic" evidence can also be useful in claim construction. *Terlep*, 418 F.3d at 1382 ("Extrinsic evidence . . . also 'may be considered

if the court deems it helpful in determining the true meaning of the language used in the patent claims.'") (quoting *Phillips*, 415 F.3d at 1318). For example, "'technical dictionaries may provide [help] to a court "to better understand the underlying technology" and the way in which one of skill in the art might use the claim terms.'" *Aquatex*, 419 F.3d at 1380 (quoting *Phillips*, 415 F.3d at 1315, in turn quoting *Vitronics Corp.*, 90 F.3d at 1584). Indeed, "[i]n some cases, it is possible to construe a claim term by applying 'the widely accepted meaning of commonly understood words.'" *Network Commerce, Inc. v. Microsoft Corp.*, 422 F.3d 1353, 1359 (Fed. Cir. 2005) (quoting *Phillips*, 415 F.3d at 1314). Therefore, "a judge who encounters a claim term while reading a patent might consult a general purpose or specialized dictionary to begin to understand the meaning of the term, before reviewing the remainder of the patent to determine how the patentee has used the term." *Phillips*, 415 F.3d at 1324.

However, the Federal Circuit Court of Appeals has recently reevaluated the usefulness of dictionaries to determine the meaning of claim terms:

> Our en banc decision in *Phillips* clarified the appropriate use of dictionaries in claim construction, rejecting the view that dictionary definitions govern unless contradicted by intrinsic evidence. *Phillips*, 415 F.3d at 1320. Nonetheless *Phillips* confirms that courts may "'rely on dictionary definitions when construing claim terms'" and that "[d]ictionaries . . . are often useful to assist in understanding the commonly understood meaning of words." *Id.* at 1322 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 n. 6 (Fed. Cir. 1996)). The court must ensure that any reliance on dictionaries accords with the intrinsic evidence: the claims themselves, the specification, and the prosecution history. *Id.* at 1314. Under *Phillips*, the rule that "a court will give a claim term the full range of its ordinary meaning," *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001), does not mean that the term will [*1349]

> presumptively receive its broadest dictionary definition or the aggregate of multiple dictionary definitions, *Phillips*, 415 F.3d at 1320- 1322. Rather, in those circumstances where reference to dictionaries is appropriate, the task is to scrutinize the intrinsic evidence in order to determine the most appropriate [dictionary] definition. *Id.* at 1322-23, 1324.

Free Motion Fitness, Inc., 423 F.3d at 1348-49. Thus, while standard and specialized dictionaries have their place in patent claim construction, the court must choose the proper dictionary definition in light of the "intrinsic" evidence of the meaning of patent terms, consisting of the patent description and the prosecution history, not merely choose a dictionary definition over the definition suggested by such "intrinsic" evidence. *See also Terlep*, 418 F.3d at 1382 (dictionaries are useful, "provided the court 'attach[es] the appropriate weight . . . to those sources in light of the statutes and policies that inform patent law.'") (quoting *Phillips*, 415 F.3d at 1324). Thus, "[w]hat *Phillips* now counsels is that in the absence of something in the written description and/or prosecution history to provide explicit or implicit notice to the public—*i.e.*, those of ordinary skill in the art—that the inventor intended a disputed term to cover more than the ordinary and customary meaning revealed by the context of the intrinsic record, it is improper to read the term to encompass a broader definition simply because it may be found in a dictionary, treatise, or other extrinsic source." *Nystrom*, 424 F.3d at 1145.[7]

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[7]The *Nystrom* decision demonstrates how the impact of dictionary definitions of claim terms has changed after *Phillips*. In a pre-*Phillips* opinion in that case, *Nystrom v. TREX Co., Inc.*, 374 F.3d 1105 (Fed. Cir. 2004), the court relied heavily on dictionary definitions to construe claim terms, such as "board" and "convex." *See Nystrom*, 374 F.3d at 1111-13 & 1115. However, the panel withdrew that opinion following the issuance of the *en banc* decision in *Phillips* and issued a second opinion. *See Nystrom*, 424 F.3d at 1138. In the post-*Phillips* opinion, instead of beginning with dictionary definitions (continued…)

Extrinsic evidence that may be useful in claim construction also includes "expert testimony," but such testimony should also be considered in the context of intrinsic evidence. *Biagro*, 423 F.3d at 1302; *Phillips*, 415 F.3d at 1318-19. More specifically, "a court should discount any expert testimony that is clearly at odds with the claim construction mandated by . . . the written record of the patent." *Phillips*, 415 F.3d at 1318 (internal quotation marks and citation omitted); *accord Network Commerce, Inc.*, 422 F.3d at 1361 (citing *Phillips* for the proposition that "expert testimony at odds with the intrinsic evidence must be disregarded").

2. Other canons of claim construction

Apart from the evidence upon which claim construction may be based, claim construction involves various "canons." One canon of claim construction is that "claim terms are presumed to be used consistently throughout the patent, such that the usage of a term in one claim can often illuminate the meaning of the same term in other claims." *Research Plastics, Inc.*, 421 F.3d at 1295 (citing *Phillips*, 415 F.3d at 1313-14, and *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001)). On the other

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[7](…continued)
of "board," the court began its analysis by looking at the patent itself. *Id.* at 1143-46. Such reorientation of the court's analysis led to a different, narrower construction of the claim term "board." *Id.* It is possible that, in light of the emphasis on the language of the patent, rather than dictionary definitions, as required by *Phillips* and applied in *Nystrom*, patent claims will be construed more narrowly in many future case. As two commentators noted, "[I]f the result of *Phillips/Nystrom* is that the courts more often confine the scope of [a] patent claim to the embodiments disclosed in the patent, patents will become less valuable, but their scope perhaps more predictable." James J. Foster and Adam Kessel, *'Phillips' leads to a different result in 'Nystrom,'* THE NATIONAL LAW JOURNAL/WWW.NLJ.COM, Dec. 5, 2005, at S.9. The wisdom of such a change, and whether or not it was the intended result of the policy shift in *Phillips*, of course, is for the Federal Circuit Court of Appeals to determine.

hand, "[w]hen different words or phrases are used in separate claims, a difference in meaning is presumed." *Nystrom*, 424 F.3d at 1143 (citing *Tandon Corp. v. United States Int'l Trade Comm'n*, 831 F.2d 1017, 1023 (Fed. Cir. 1987)). Similarly, the court must interpret claims so that no term becomes "superfluous." *See Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) ("A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so."); *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1410 (Fed. Cir. 2004) (stating that interpretations of claims rendering claim terms superfluous is generally disfavored).

Another canon of patent claim construction is that the patentee may act as "lexicographer." *See Phillips*, 415 F.3d at 1316. In other words, "the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess," and when that happens, the patentee's definition must govern. *Id.* However, the authority of the specification as a source for definitions for claim terms is not limitless. Rather, "[t]he court must take care in its analysis, when locating in the written description the context for a disputed term, not to import a limitation from that written description. It must use the written description for enlightenment and not to read a limitation from the specification [into the construction of the term]." *Playtex Prods., Inc. v. Procter & Gamble Co.*, 400 F.3d 901, 906 (Fed. Cir. 2005) (citing *Comark Communications v. Harris Corp.*, 156 F.3d 1182, 1186-87 (Fed. Cir. 1998)). To put it another way, "'[i]t is axiomatic that claims, not the specification embodiments, define the

scope of protection.'" *Id.* (quoting *Dow Chem. Co. v. Sumitomo Chem. Co.*, 257 F.3d 1364, 1378 (Fed. Cir. 2001) (internal citation omitted)).[8]

With these principles in mind, the court turns to construction of the disputed claim terms in this case, patent-by-patent and claim-by-claim. However, the court must first resolve the question of the role that the parties' proffered constructions play in the court's construction of claim terms.

3. Do the parties' proffered constructions limit the court's choices?

As mentioned above, after the *Markman* hearing was rescheduled to December 5, 2005, the court requested, by letter dated October 29, 2005, that the parties submit briefs on or before November 14, 2005, on the role of the parties' competing definitions in the court's claim construction process and the extent to which the court must choose only between the parties' competing definitions or is, instead, free to construe the claim terms for itself. In its Supplemental Brief in response to that question, filed November 14, 2005 (docket no. 100), Electrolux asserts that the court is not required to make a "binary"

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[8]The Federal Circuit Court of Appeals has, itself, recognized the difficulty of looking to the specification to construe claim terms without reading limitations in the specification into the claims and has offered some guidance:

> "We recognize that there is sometimes a fine line between reading a claim in light of the specification, and reading a limitation into the claim from the specification." *Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1186, 48 USPQ2d 1001, 1005 (Fed. Cir. 1998). In locating this "fine line" it is useful to remember that we look "to the specification to ascertain the meaning of the claim term as it is used by the inventor in the context of the entirety of his invention," and not merely to limit a claim term. *Id.* at 1187, 48 USPQ2d at 1005.

Interactive Gift Exp., Inc. v. Compuserve, Inc., 256 F.3d 1323, 1331-32 (Fed. Cir. 2001).

choice between the constructions proposed by the parties. Rather, Electrolux asserts that the court is required to construe the claim terms using the analytical framework clarified and refined in *Phillips*. Similarly, in its Supplemenatl *Markman* Brief, also filed November 14, 2005 (docket no. 102), Maytag asserts that claim construction is not a "binary" choice between the parties' constructions, but a process in which the court alone has the duty to construe the claim terms in dispute and, therefore, the court is free to disagree with any proposed construction. Indeed, Maytag asserts that the Federal Circuit Court of Appeals has expressly held that the court is free to adopt a construction independent of those suggested by the parties, citing *Exxon Chem. Patents, Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1555 (Fed. Cir. 1995). In light of the parties' agreement and the authorities upon which they rely, the court concludes that it has an obligation to construe the patent terms independently; therefore, the court is not bound to adopt either parties' proffered construction of any claim term, but must, instead, construe the disputed claim terms for itself, applying the *Phillips* methodology. Therefore, the court turns to its independent construction of the claim terms, but the court will use the parties' proffered constructions as its starting point.

C. Construction Of Disputed Claim Terms

1. Disputed terms in the '909 patent

a. The disputed term in Claim 23: "Grooves"

i. Claim language. The first term that the court must construe is found in Claim 23 of the "product" patent, the '909 patent. The only disputed term in this claim is "grooves." Claim 23, with the disputed term italicized, states the following:

> **23**. A plastic washing machine basket comprising:
> a substantially circular base wall having a peripheral portion; and
> an annular plastic sidewall extending upward from the peripheral portion of said base wall to a terminal edge, said sidewall having inner and outer surfaces, *grooves* formed in said inner surface of said sidewall, a plurality of spaced apertures extending through said sidewall, said apertures located within said *grooves*.

The '909 patent, Claim 23 (emphasis added).

ii. The parties' definitions and arguments. The parties' proffered definitions of this term are shown below, with bold font indicating differences between their definitions. Also, the authority on which each party relies for its definition is shown just below that party's definition.

"GROOVE"	
Maytag's Definition	**Electrolux's Definition**
"a **narrow** depression, channel or trough **in a surface**"	"a depression, channel or trough **in the sidewall surface of the basket formed by a corresponding projection on the mold core**"
Maytag's Authority	**Electrolux's Authority**
'909 patent, col. 2, ll. 3-10; col. 3, ll. 17-23; col. 3, ll. 61-64; col. 4, ll. 36-53; col. 5, ll. 43-56; col. 6, ll. 60-67; claims 1, 28 and 29; dictionary definition of "groove"	'909 Patent, col. 3, lines 17-19 and lines 59-64; col. 5, lines 43-48; col. 6, lines 60-64.

Maytag contends that its construction is correct, because it reflects the "plain and ordinary meaning" of "grooves" in the context of Claim 23 and the '909 patent generally. Maytag points out that the claim language contains no limitations on the shape of the

"grooves," so that nothing departs from the ordinary meaning of "groove" as "a narrow depression, channel, or trough in a surface." This construction is reinforced, Maytag contends, by looking to other claims—which, among other things, refer to "teardrop-shaped grooves," making clear that the patentee knew the difference between a simple groove and a groove with a specified shape. Maytag contends that this definition is also reinforced by the specification—which likewise makes clear that a particular shape of the groove is specified when one is intended. Finally, Maytag contends that its definition is reinforced by extrinsic sources, such as dictionary definitions. In contrast, Maytag contends that Electrolux's construction is in error, because the term "grooves" does not refer to any projection on a corresponding surface, and Claim 23 of the "product" patent says nothing about how the grooves are made.

In response, Electrolux contends that the '909 patent refers throughout to teardrop-shaped *recessed* portions formed *in* the interior sidewall. Electrolux also contends that the '909 patent nowhere limits the "groove" to a particular width or narrowness and always refers to the "groove" as recessed *into* the surface of the sidewall, not merely made as part of the sidewall. Electrolux also points out that the patent language upon occasion refers to the "groove" as "teardrop-shaped" and as having both a broader portion and a narrower portion, not simply as "narrow." Thus, Electrolux argues that claim differentiation bars Maytag from expressly including a "narrow" limitation as part of the general definition of "groove." To do so, Electrolux argues, would render some of the language of other claims mere surplusage.

In rebuttal, Maytag contends that Electrolux is redefining "groove" to mean "any depression," which is far too broad. Instead, Maytag argues that the specification and figures all show the "grooves" to be narrow, whether or not they are "teardrop-shaped." The connotation of all of the dictionary definitions, Maytag contends, is that a "groove"

is an "elongated" and "narrow" depression. Maytag reiterates its contention that Electrolux is also improperly importing from the specification the location and method of creating the grooves into the construction of "grooves." In rebuttal, Electrolux contends that Maytag is improperly importing a "narrow" limitation into "grooves" in Claim 23, while ignoring the express teachings of the specification with regard to how the "grooves" are formed.

In its surrebutal, Maytag asserts that it is not defining "grooves" as "narrow," but defining "grooves" as "narrow depressions," because the ordinary meaning of "groove" connotes a "narrow depression," such as a "channel" or "trough." Maytag also reiterates that Electrolux is improperly importing the method of producing the washing machine basket into the "product" patent, when the Examiner required separation of the "product" and "process" claims into separate patents. In its surrebutal, Electrolux asserts that how the structure of the "groove" is formed is important to understanding the patentee's use of the term in the claims.

At the oral arguments, Electrolux identified the construction of "grooves" as a matter deserving further argument. Electrolux contended that it is improper to import a "narrow" limitation into the definition of "grooves" when there is no such limitation in any claim or portion of the specification. Electrolux points out that the patentee used "narrow" in reference to other parts of the "groove," for example, in Claims 10 and 16, and inclusion of such a limitation would exclude other embodiments. Moreover, Electrolux asserted that reading a "narrow" limitation into "grooves" was expressly rejected by the Federal Circuit Court of Appeals in *Beckson Marine, Inc. v. NFM, Inc.*, 292 F.3d 718, 724 (Fed. Cir. 2002). In response, Maytag asserted that Electrolux's construction would turn a "groove" into any depression, while "narrow depression" is the ordinary meaning of "groove" and is the meaning supported by the claim terms and specification in this case.

Indeed, Maytag asserts that *Beckson* is not controlling, precisely because it involved use of the term "groove" in an entirely different context.

iii. Analysis. Beginning with the words of the claim, *Nystrom*, 424 F.3d at 1142; *Biagro*, 423 F.3d at 1302, it is readily apparent that Claim 23 states that the "sidewall [has] grooves *formed* in said inner surface of said sidewall," *see* the '909 patent, Claim 23 (emphasis added), but it does not state or incorporate the process whereby the grooves are "formed" into the meaning of "grooves." Also, although the claim language does specify the location of the "grooves," that is, "in said inner surface of said sidewall," *id.*, that language does not define "grooves," because "grooves" must necessarily be *in something*. Thus, while Claim 23, taken as a whole, requires a plastic washing machine basket with "grooves" in the sidewall, the claim does not in any way narrow the meaning of "grooves" to mean only "grooves" that are "formed by a corresponding projection on the mold core," as Electrolux suggests, nor is the location of the "grooves" part of the definition of "grooves," although for purposes of the *claim limitation* in Claim 23, the "grooves" *are* claimed to be "in said inner surface of said sidewall."

Neither Claim 23, nor any other claim, nor the specification of the '909 patent suggests that "groove" is a "technical [term] or term of art," so it does not appear that the specification is necessarily the *only* source for understanding the meaning of "grooves." *See Aquatex*, 419 F.3d at 1380 (quoting *Phillips*, 415 F.3d at 1315, for the proposition that the specification is "[t]he best source" for understanding a claim term, where the term is "technical or a term of art"). Clearly, no part of the specification to which the parties have pointed the court suggests that the patentee was its own "lexicographer" as to the meaning of "grooves," so that there is no "governing" definition for "grooves" to be found in the specification. *Compare Phillips*, 415 F.3d at 1316 (the patentee may act as lexicographer, and when the patentee does so, its definition must govern). Also, although

the specification remains of "central importance" to determining the proper construction of the term, *id.*, and may even be "dispositive" in some cases, *Phillips*, 415 F.3d at 1314, the court finds that this specification is helpful primarily to show that the patentee used "grooves" in the "ordinary" sense.

Specifically, most of the references to "grooves" in the specification that are cited by the parties show that, when a specific shape for the "groove" is intended, *e.g.*, "teardrop-shaped," the patentee specified that shape. *See* the '909 patent, col. 2, ll. 3-10 (Summary Of The Invention referring to "teardrop-shaped grooves"); col. 3, ll. 17-23 (Detailed Description Of The Invention also referring to "teardrop-shaped grooves"); col. 3, ll. 61-64 (same). In other circumstances, the patentee left the shape of the "groove" unspecified. *See id.*, col. 4, ll. 36-53 (referring simply to "grooves"). Undeniably, the specification refers to "teardrop-shaped projections **132**" that extend from the "mold core **90**" "in order to form beveled apertures **44** and the teardrop-shaped grooves **50** in basket **2**," *id.*, col. 5, ll. 43-56; *see also id.* col. 6, ll. 60-67, but this part of the specification does not define "grooves" or make the process whereby the "grooves" are created part of the definition of "grooves." Thus, specifications of particular shapes for the "grooves" in the patent specification and the claims, such as those cited above and in unasserted Claim 29—which expressly claims "grooves [that] are teardrop-shaped," *see* the '909 patent, Claim 29—suggest that "groove," when standing alone, must have its "ordinary" meaning. *See Nystrom*, 424 F.3d at 1143 (different words in separate claims suggest differences in meaning). Otherwise, the express definitions of shape in other parts of the specification or other claims would be "superfluous." *Merck*, 395 F.3d at 1372 (terms must not be interpreted in such a way as to make any other terms superfluous).

Similarly, the claimed limitation on certain "grooves" as having "narrowed end portions," versus "enlarged end portions," as in Claims 10 and 16, does not exclude a

definition of "grooves" as "narrow depressions," as Electrolux contended at oral arguments. Specification of the relative widths of the "end portions" of the "grooves" again suggests only that, when a specific (or relative) shape was intended for "end portions" of a "groove," such specific shape was claimed, but that, for any other portion of the "groove," the term was intended to have its ordinary meaning.

Finding nothing dispositive in the claim language itself or the specification of the '909 patent concerning the meaning of "groove" in Claim 23, the court turns to extrinsic evidence, such as standard dictionaries, for guidance on "the widely accepted meaning of [this] commonly understood word[]." *Phillips*, 415 F.3d at 1314. At this point, the parties' dispute is between "a *narrow* depression, channel, or trough," as Maytag defines the term, and "a depression, channel, or trough," as Electrolux would have it. Plainly, a "groove" may be a kind of "depression," but not every "depression" is a "groove." For example, MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY (10th ed. 1995) defines "depression" as "a depressed place or part: HOLLOW," *id.* (definition 3 of "depression *n*"), while it defines "groove" as "*a long narrow* channel or depression." *Id.* (definition 1 of "groove *n*") (emphasis added); *see also* Plaintiff's *Markman* Appendix, Exhibit C (definition 2 a of "groove *n*" from WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY (no date shown), stating "*a long narrow hollow* or channel made artificially in a surface") (emphasis added). By relying on such a dictionary limitation on the shape of the pertinent "depression" Maytag is not improperly redefining "groove" in the patent as a "narrow groove," as Electrolux contends, but properly defining the kind of "depression" referred to by "groove" as a "narrow depression." Nor is it appropriate to conclude, as Electrolux contends, from a single part of the specification stating that the "[t]eardrop-shaped grooves **50** generally taper along their length, in both width and depth," *see id.* col. 3, lines 17-19, that the patentee intended to eschew a definition of a "groove," standing alone, as a

"*narrow* depression." Rather, "tapering" suggests a specific kind of "narrow depression" in the particular circumstance referred to in this part of the specification, *i.e.*, "a narrow depression" that "become[s] progressively smaller toward one end." MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY (10th ed. 1995) (definition 1 of "taper *vb*"). Similarly, the references to "narrowed end portions" and "enlarged end portions," for example, in Claims 10 and 16, suggest only that the "narrow depression" has "end portions" that are relatively "enlarged" or "narrowed."

Nor is the court persuaded by Electrolux's contention that the Federal Circuit Court of Appeals rejected the ordinary meaning of "grooves" as "narrow depressions" in *Beckson Marine, Inc. v. NFM, Inc.*, 292 F.3d 718, 724 (Fed. Cir. 2002). Rather, in *Beckson*, the court held that, *in the context of the patent at issue*, "the ordinary meaning [of 'groove'] is not limited to long and narrow U-shaped entities, but encompasses as well other structures that drain water." *Beckson*, 292 F.3d at 724. This conclusion was based, in part, on use of "[t]he broad term 'draining structures,'" which the court concluded "suggests that the applicant did not limit the claim term 'groove' to a specific width or length." *Id.* "In fact," the court held, "the written description does not require long and narrow grooves at any point." *Id.* This court doubts that the construction of "grooves" in *Beckson*, concerning a completely different patent, could, in any way, be dispositive of the meaning of "grooves" in the '909 patent, which relates to a completely different device. Moreover, in the '909 patent, there is no broader generic term, such as "draining structures," associated with "groove" that would suggest that the patentee did not intend any limitation on width or length. Instead, in the context of all of the evidence bearing on the question here, the court concludes that, while the applicant may not have intended to limit the claim term "groove" to a *specific* width or length, the patentee did intend to use the term in the sense of a depression that was narrow in width *relative* to its length, *i.e.*,

a "narrow depression." For example, a fair inference from the more specific specifications of the "grooves" as "teardrop-shaped" or as having "narrowed" and "enlarged" end portions is that the "grooves" are relatively narrower in width than length, that is, that they are "elongated" or "narrow" depressions.

In short, the court concludes that the proper construction of "groove" for purposes of the '909 patent is Maytag's definition, "a narrow depression, channel or trough in a surface."

b. The disputed term in Claim 25: "Annular sidewall . . . diverging radially outwardly to an upper terminal edge"

i. Claim language. The next claim term in the '909 patent that the court finds is actually "in dispute" at this time is in Claim 25. That disputed claim term is "annular sidewall . . . diverging radially outwardly to an upper terminal edge." Claim 25, with the disputed term highlighted, states the following:

> **25**. A plastic washing machine basket comprising:
> a base wall having a peripheral portion, said base wall being formed of plastic; and
> an *annular sidewall* extending upward from the peripheral portion of the base wall and *diverging radially outwardly to an upper terminal edge*, said sidewall including inner and outer surfaces having spaced apertures extending therethrough with the outer surface being beveled at the apertures, said sidewall being made of plastic and integrally formed with both the base and the apertures such that the basket has a smooth, uniform construction.

The '909 patent, Claim 25 (emphasis added).

ii. The parties' definitions and arguments. The parties' proffered definitions of this term are the following, with bold and italic font indicating differences between their

definitions. Again, the authority on which each party relies for its construction is shown just below that party's definition.

"ANNULAR SIDEWALL . . . DIVERGING RADIALLY OUTWARDLY TO AN UPPER TERMINAL EDGE"	
Maytag's Definition	**Electrolux's Definition**
"a sidewall **formed like a ring and having a radius measured from the vertical center axis *to the sidewall* that increases moving from the base wall to the edge of the access opening of the sidewall**"	"**the structure of** the sidewall **is disposed from a central axis a greater distance at the top edge than at the bottom**"
Maytag's Authority	**Electrolux's Authority**
'909 patent, Fig. 2 and 4; col. 4, ll. 19-22; col. 4, ll. 32-34; col. 6, ll. 37-39; claims 11, 12 and 18; dictionary definitions of "diverging" and "radial"	'909 Patent at Fig. 2 (radially outwardly); Fig. 3; dictionary definitions of "radially"

In its initial *Markman* brief, Maytag contends that its definition is correct, because it is consistent with the patent specification. For example, Maytag contends that the Detailed Description Of The Invention makes clear that some "slant" to the inner surface of the sidewall of the washing machine basket is necessary to allow for easy removal of the basket from the mold core. Maytag also contends that the illustrations show that the basket gets wider from the base to the open end. Indeed, Maytag contends that its construction is the only one that is consistent with both the ordinary meaning of the claim terms and the disclosures of the '909 patent. In contrast, Maytag contends that Electrolux's construction rewrites the claim by playing word games like inserting "structure of" before "sidewall." Maytag also contends that Electrolux's definition makes no sense, because it measures the increasing radius as the distance between the center axis and the *outer* surface of the sidewall, not the *inner* surface that is formed by the mold core.

Maytag contends that Electrolux is attempting to maintain a frivolous argument of non-infringement based on its contention that its baskets do not have an increasing radius from the center axis to the *outer* surface of the sidewall, when the radius to the *outer* surface is irrelevant to aiding removal of the basket from the mold core.

In its initial *Markman* brief, however, Electrolux argues that its construction of this claim term is correct, precisely because the claim itself refers to the "sidewall," not merely to the "inner surface" of the sidewall. Thus, Electrolux contends that the *entire* sidewall must diverge outwardly from the bottom to the top of the washing machine basket and that such a construction is confirmed by the illustrations in the patent, which show the entire wall diverging. Electrolux contends that it is Maytag, not Electrolux, that is rewriting the claim language to focus only on the radius from the center axis to the inner surface.

In its rebuttal brief, Maytag reiterates that Electrolux's construction ignores the invention, which involves ease of removal from the mold core; instead, Maytag contends that Electrolux is attempting to read the language of the patent claim in the abstract. Indeed, Maytag points to parts of the specification that explain that the purpose of the radial divergence of the sidewall is to further facilitate removal of the basket from the mold assembly. Electrolux's construction, according to Maytag, does not align with the claim language or the specification. In its rebuttal brief, on the other hand, Electrolux contends that Maytag's construction disregards claim limitations and explicit definitions in the patent specification. Electrolux points out that the claim language expressly requires that the "sidewall," not merely the "inner surface" of the sidewall, diverge radially, and that the sidewall is defined to include both inner and outer surfaces. Thus, Electrolux contends that the construction of the disputed term must encompass radial divergence of the entire structure of the sidewall, not just the inner surface. Moreover, Electrolux contends that Maytag did not "invent" draft on a mold core, that is, radial divergence of the product

formed, to facilitate removal of the product from the molding apparatus. Finally, Electrolux asserts that there is not a single reference in the patent to radial divergence of only the *inner* surface of the sidewall.

In its surrebuttal brief, Maytag contends that its construction merely clarifies what one of ordinary skill in the art would understand: that the purpose of the radial divergence claim limitation is to allow the basket to be removed from the mold core. Moreover, Maytag contends that Electrolux's proposed definition is the one that imports a limitation into the claim language, by requiring radial divergence of both the inner and outer surfaces of the sidewall, and such a construction simply is not supported by the claim language or the specification. In its surrebuttal brief, on the other hand, Electrolux reiterates that the '909 patent teaches that the "sidewall" diverges radially, not that the "inner surface of the sidewall" diverges radially. Electrolux also points out that the claim language shows that, when Maytag wanted to refer to a specific part of the sidewall, it knew how to do so.

Although the parties also addressed the construction of this term during oral arguments at the *Markman* hearing, their oral arguments are best understood as responses to the court's proposed construction of the term. Therefore, those arguments will be addressed below.

iii. Analysis. The court notes that, as contentious as the construction of this claim term appears to be, there is some common ground between the parties' proffered constructions. First, the parties agree that an "annular sidewall" means a sidewall "shaped like a ring." *See, supra*, Section I.C., at page 23 (noting agreed term constructions, including the construction of "annular" as "shaped like a ring"). The parties also agree on the construction of "diverges radially" to the extent that they agree that the radius (distance from a central axis) of the annular sidewall is greater at the open end of the washing machine basket than it is at the base wall. *Compare* Maytag's definition ("having

a *radius measured from the vertical center axis* to the sidewall that *increases moving from the base wall to the edge of the access opening* of the sidewall") (emphasis added), *with* Electrolux's definition (*"disposed from a central axis a greater distance at the top edge than at the bottom*") (emphasis added).[9]

The crux of the parties' disagreement is whether the increasing radius should be measured to the inner surface of the sidewall only, as Maytag contends, or to both the inner and outer surfaces, as Electrolux contends. However, the court notes other differences between the parties' definitions that the court finds should be resolved before the court addresses the parties' primary disagreement.

One of those differences is that Electrolux insists on calling the reference points on the sidewall for measurement of the radii the "bottom" and the "top edge" of the washing machine basket, while Maytag refers to them as the "base wall" and the "edge of the access opening of the sidewall." The other difference is that Electrolux's definition suggests that only the radii at the "bottom" and the "top edge" matter, while Maytag's definition suggests that the radius "increases" from the "base wall" to the "edge of the access opening of the sidewall."

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[9]This reading is also supported by the dictionary meanings of "radially" offered by both parties, for example, in their Joint Claim Construction Statement, concerning "annular sidewall . . . diverging radially outwardly to an upper terminal edge." *See* Maytag's construction (definition of "radial" as "relating to or placed like a radius: mov[ing] and retaking place along a radius: of, relating to, or adjacent to a bodily radius," quoting WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY, p. 1871); Electrolux's construction (defining "radially" as "radiating from or converging from a common center," citing AMERICAN HERITAGE DICTIONARY at 1490, n.1(b); as "characterized by divergence from a center," citing MERRIAM-WEBSTER DICTIONARY at 962, def. 1, n.2(b), and as "branching out in all directions from a common center," citing WEBSTER'S NEW WORLD DICTIONARY at 1170, n. 1(a)).

Beginning once again with the words of the claim, *Nystrom*, 424 F.3d at 1142; *Biagro*, 423 F.3d at 1302, the court finds that there is some justification for Electrolux's construction of opposite ends of the washing machine basket as the "bottom" and the "top edge," respectively. The court acknowledges that there are references to the "annular sidewall extending *upward*" from the base wall in both this claim (No. 25) and in Claim 23, and this claim (No. 25) also refers to an "*upper* terminal edge." *See* the '909 patent, Claims 23 & 25 (emphasis added). On the other hand, the court has found no similar references in the Detailed Description. *See Phillips*, 415 F.3d at 1314-16 (the specification remains of "central importance" to determining the proper construction of the term and may even be "dispositive"). Rather, references in the Detailed Description are to an "annular sidewall **8** extending *from* a peripheral portion **10** of base wall **5**," which suggests direction away from the base wall, but not necessarily "upward." *See* the '909 patent, Detailed Description, col. 2, *ll*. 45-46 (emphasis added); *id.*, col. 3, *ll*. 5-6 (same); *but see id.*, Summary Of The Invention, col. 2, *ll*. 7-8 ("annular sidewall extending *upward* from a peripheral portion of a base wall") (emphasis added). Thus, the court reads references to "extending upward" to suggest a direction in which the annular sidewall extends from the base wall, rather than as a categorical limitation on the orientation of the plastic washing machine basket, such that it has a "top" and a "bottom." Moreover, the claims and the specification consistently refer to the closed end of the washing machine basket as the "base wall **5**," not as the "bottom" of the basket, and refer to the open end only indirectly by referring to the "terminal edge **36**" of the sidewall, not to the "top" of the basket. These references do not suggest that the "base wall **5**" is necessarily the "bottom" of the basket or that the "terminal edge **36**" is necessarily at the "top." Finally, even a lay judge has sufficient imagination to recognize that the washing machine basket could be mounted "on its side" for a front-loading washing machine, that is, with the

central axis of the washing machine basket horizontal rather than vertical. Indeed, Figure 2, of the '909 patent, reproduced above on page 14, appears to show the washing machine basket in just that orientation.

In contrast, the court finds Maytag's construction of the closed end of the washing machine basket as the "base wall" to be consistent with the patent claims and the specification. Indeed, the court finds no other form of reference to the closed end of the washing machine basket anywhere in the patent claims or specification. The court cannot say the same, however, for Maytag's construction of the open end of the washing machine basket as the "access opening of the sidewall." Such a construction is untenable, because the "access opening," if such it is, is to the interior of the washing machine basket, not of, to, through, or into the "sidewall." Also, the court finds nothing in the patent claims or specification contrary to construing or describing the end of the washing machine basket opposite the "base wall" as the "open end." Such a definition plainly comports with the plain and ordinary understanding of a "basket," not to mention the illustrations and descriptions of the washing machine basket in the patent.

Thus, designating the "base wall" the "bottom" and the open end the "top" is misleading and inconsistent with the specification and illustrations. Electrolux has not pointed to any part of the patent claims or any part of the specification that makes inevitable or exclusive a construction of the washing machine basket as having "top" and "bottom" ends, even considering the references in Claim 23 and Claim 25 to "upward." Ultimately, the court finds that introducing "top" and "bottom" limitations on the washing machine basket is unwarranted, when accurate references to the "base wall" and "open end" will suffice. *PPG Indus.*, 156 F.3d at 1355 (the task of the court is to "define[ ] the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction"). Therefore, the court concludes that the

two ends of the washing machine basket are properly defined as the "base wall" and the "open end," respectively.

Next, again relying on the words of the claim, *Nystrom*, 424 F.3d at 1142 (construction begins with the words of the patent); *Biagro*, 423 F.3d at 1302 (same), and the specification of the patent, *see Phillips*, 415 F.3d at 1314-16 (the specification remains of "central importance" to determining the proper construction of the term and may even be "dispositive"), the court must reject Electrolux's assertion, or unintentional implication, that the radius from the central axis is relevant only at two points, at the base wall and at the edge of the sidewall at the open end. *See* Electrolux's definition ("the structure of the sidewall is disposed from a central axis a greater distance *at the top edge than at the bottom*") (emphasis added). First, whatever the claim language means, "diverging radially outwardly" means that the radius continuously increases moving from the base wall to the edge of the sidewall at the open end, not just that it is greater at the open end than at the base wall. The difference, for example, is that a continuously increasing radius would suggest that the sidewall "slants" outward, while Electrolux's definition suggests a sidewall with a "stair-step" at the open end. To put it another way, Electrolux's construction reads "diverging radially outwardly" completely out of the claim limitation. Second, although the court has not found any portion of the Detailed Description Of The Invention, and the parties have pointed to none, that actually describes the "radially diverging sidewall,"[10]

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[10]Maytag cites only portions of the specification that state that the mold core is "tapered" or "diverges inwardly," which Maytag apparently asserts imply that the sidewall of the washing machine basket molded upon such a core must also have a corresponding "taper" or "diverge outwardly." *See* the '909 patent, col. 4, ll. 19-22 (the mold core **90** has a "tapered outer surface **163**"); *id.* at col. 6, ll. 37-39 ("The outer peripheral surface of core mold **90** diverges slightly inwardly from bottom to top as shown [in] FIGS. 3 and (continued…)

a careful examination of Figure 2 does reveal that the radius from the central axis to the sidewall **8** continuously increases from a point at the base wall **5** to a point at the edge of the sidewall at the open end of the washing machine basket, whether one considers the radius from the central axis to the inner surface or to the outer surface of the sidewall. *See* the '909 patent, Fig. 2 (reproduced above, page 14). Next, turning to extrinsic evidence, such as standard dictionaries, for guidance on "the widely accepted meaning of [this] commonly understood word[ ]," *Phillips*, 415 F.3d at 1314, the court finds that a standard definition of "diverging" is "mov[ing] or extend[ing] in different directions from a common point: draw[ing] apart," MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY (10th ed. 1995) (definition 1 a of "diverge *vb*"), which suggests that the sidewall *continuously* moves away from the central axis, rather than suddenly increases in a sort of "stair step." Finally, at the *Markman* hearing, Electrolux acknowledged that it did not mean to imply a stair-step configuration, but a regular or continuous divergence, so that the court's construction was appropriate in this regard.

The court also finds that use of the term "outwardly" suggests that the radius of the annular sidewall *increases continuously* from the base wall to the edge of the sidewall at the open end, as the nature of the change shown, for example, in Figure 2 of the patent is, indeed, "continuously increasing," and this construction also comports with the dictionary definition of "outwardly" as "toward the outside," again suggesting a *continuous* rather than an *abrupt* increase in the radius. *See* MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY (10th ed. 1995) (definition 1 b of "outwardly *adv*"). Therefore, the court provided the parties with its tentative construction of "diverging radially outwardly" to mean, at a

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[10](…continued)
4. . . .").

minimum, that the radius of the annular sidewall *continuously* increases from the base wall to the edge of the sidewall at the open end.

At the *Markman* hearing, however, Maytag took issue with this part of the court's construction, asserting that "continuously" is unnecessary, because construing the term to require an increase in the radius "moving from base wall to open end" was sufficient. Somewhat more specifically, Maytag asserted that the court's insertion of "continuously" could require that there be no variation in the angle of divergence from the central access. In response, Electrolux asserted that "continuously" is what "diverges radially outwardly" means. The court is not persuaded that "continuously" should be stricken from the construction of this term. For the reasons stated above, "diverging" and "outwardly" both plainly suggest that the radius *continuously* increases from the base wall to the edge of the sidewall at the open end.

At last, the court reaches the crux of the parties' dispute, which is whether the continuously increasing radius should be measured only from the central axis to the "inner surface of the sidewall," as Maytag asserts, or to both the inner and outer surfaces of the sidewall, such that the *entire* "structure of the sidewall" "diverg[es] radially outwardly," as Electrolux asserts. The short answer to Maytag's assertion that only the radius to the *inner* surface of the sidewall matters is that there is no such limitation to be found in this or any other claim of the patent. *See Nystrom*, 424 F.3d at 1142 (construction begins with the words of the patent); *Biagro*, 423 F.3d at 1302 (same). Claim 25, instead, claims "an annular sidewall . . . diverging radially outwardly to an upper terminal edge," *see* the '909 patent, Claim 25, not just the "*inner surface* of the annular sidewall . . . diverging radially outwardly to an upper terminal edge." The claim then defines the sidewall as "including inner and outer surfaces," and clearly specifies *which* surface is intended when only *one* is relevant to a limitation, for example, by stating, "the *outer surface* [of the

sidewall] [is] beveled at the apertures." Thus, the claim language expressly states that the "sidewall," not just the "inner surface of the sidewall," diverges radially outwardly" from the central axis of the washing machine basket.

Furthermore, attempting to read Maytag's "inner surface" limitation into this portion of the patent claim, on the basis that the specification refers to corresponding "draft" on the mold core, would be to improperly import or read a limitation from the specification into construction of the claim term. *See Playtex Prods., Inc.*, 400 F.3d at 906 ("The court must take care in its analysis, when locating in the written description the context for a disputed term, not to import a limitation from that written description. It must use the written description for enlightenment and not to read a limitation from the specification [into the construction of the term]."") (citing *Comark Comms.*, 156 F.3d at 186-87). Indeed, Maytag's construction is based on what the court finds to be, at best, a tenuous inference that only the radial divergence of the inner surface of the washing machine basket was intended, because only the outer surface of the mold core was correspondingly tapered, and the radial divergence was intended to facilitate removal of the washing machine basket from the mold core. *See* the '909 patent, Detailed Description, col. 4, *ll.* 19-22 (the mold core **90** has a "tapered outer surface **163**"); col. 6, *ll.* 37-39 (the outer surface of the mold core **90** "diverges slightly inwardly from the bottom to top"); Claim 11 (claiming that the outward divergence is "to further facilitate removal of said tub from the mold assembly"); Claim 12 (same); Claim 18 (same). These portions of the specification plainly do *not* exclude the possibility that the *outer surface* of the sidewall, or the entire structure of the sidewall, also "diverg[es] radially outwardly" from the central axis, because nothing about them suggests that a corresponding divergence of the outer surface of the sidewall is excluded or would, in any way, be contrary to the purpose of facilitating removal of the washing machine basket from the mold core.

Moreover, the corresponding "cavity sidewall member[s] **102**" are defined as "extend[ing] about the periphery of mold core **90** with a first space therebetween," *see, e.g.,* the '909 patent, col. 3, *ll.* 38-40, which suggests that the space between the mold core and the cavity sidewall members *is uniform*, rather than widening or thinning. Finally, the court suggested in its tentative draft of this ruling that the illustrations of the washing machine basket, reproduced above, on page 14, plainly show that the sidewall is of uniform thickness, such that the outer surface of the sidewall *also* "diverg[es] radially outwardly." At the *Markman* hearing, Maytag took issue with this tentative finding, asserting that the sidewall as illustrated does grow thinner toward the open end. While Maytag may be correct that the sidewall, as illustrated, grows thinner toward the open end, the illustration unmistakably shows that *both* the inner and outer surfaces of the sidewall "diverg[e] radially outwardly." Maytag poses the question, what if only one surface of the sidewall "diverges radially outwardly," such that the inner surface "diverged radially outwardly," but the outer surface remained parallel to the central axis? Would the limitation "read on" such a configuration? The court finds it unnecessary to answer that question, which might require consideration of infringement under the doctrine of equivalents, for example, but certainly asks for an answer to a hypothetical question of infringement that is not pertinent to claim construction.

Finally, because the court's construction relies primarily on the unambiguous meaning of "sidewall" in Claim 25 as the *entire* sidewall, not just the inner surface of the sidewall, the court finds it unnecessary to accrete onto that construction Electrolux's "structure of" language, because to do so might be to construe the claim term with greater specificity than is warranted by the claim language. *See PPG Indus.*, 156 F.3d at 1355 (the task of the court is to "define[ ] the claim with whatever specificity and precision is

warranted by the language of the claim and the evidence bearing on the proper construction").

Thus, the court's construction of "annular sidewall . . . diverging radially outwardly to an upper terminal edge" is the following: "a sidewall shaped like a ring . . . continuously increasing in radius from the central axis moving from the base wall to the edge of the sidewall at the open end of the washing machine basket."

c. The disputed term in Claim 26: "Knit lines"

i. Claim language. The next claim term in the '909 patent that is "in dispute" at this time is in Claim 26. That disputed claim term is "knit lines." Claim 26, with the disputed term highlighted, states the following:

> **26.** The plastic washing machine basket of claim **25**, wherein the basket lacks *knit lines* on the inner surface.

The '909 patent, Claim 26 (emphasis added).

Although Maytag identified "knit lines" as a term "in dispute" in the Corrected Joint Claim Construction Statement (docket no. 67), at 8, Maytag offered no argument in support of its construction of this term in its initial *Markman* brief. Instead, Maytag argued in its rebuttal brief that "knit lines" is not a term in dispute for infringement purposes, because Maytag is not even asserting infringement of Claim 26. In its surrebuttal, Electrolux contended that this claim term is "in dispute" for purposes of its invalidity challenge, even if it is not in dispute for purposes of Maytag's infringement claims.

In its tentative draft ruling, provided to the parties prior to the *Markman* hearing, the court concluded that this term was not "ripe" for construction, because Electrolux had not shown that the term was "in dispute" for infringement or for any other purpose. However, following the hearing, the court revised that conclusion, and found above, in

Section II.A.1.b., beginning on page 36, that this term is also "in dispute" at this time for purposes of Electrolux's "enablement" challenge to the validity of the '909 patent. Therefore, the court must now construe this term, as well.

ii. The parties' definitions and arguments. Pursuant to the court's September 6, 2005, Order (docket no. 61), the parties both offered constructions of this term. The parties' proffered definitions of this term are the following, with bold font indicating differences between their definitions. Again, the authority on which each party relies for its construction is shown just below that party's definition.

"KNIT LINES"	
Maytag's Definition	**Electrolux's Definition**
"a line that **visually indicates a defect** on a molded plastic article **caused by the meeting of two flow fronts during the molding operation"**	"lines that **may or may not be visible** to the human eye **that form when the molten plastic flows around the core pins and then solidifies**"
Maytag's Authority	**Electrolux's Authority**
'909 patent, col. 1, ll. 24-25; col. 1, ll. 33-50; specialized dictionary definition of "weld mark"	*See* '909 Patent at col. 1, lines 22- 25; col. 5, lines 48-56; col. 6, lines 55-59; ProtoMold website

At the *Markman* hearing, Maytag focused on the specification, pointing out that the purposes of the invention are, *inter alia*, to produce a washing machine basket with a smooth inner surface and to eliminate "knit lines" that "visually indicate defects." Thus, Maytag contends that the appropriate construction of "knit lines" requires a limitation to "visible knit lines" or "knit lines that visually indicate a defect," not "invisible" lines. In response, Electrolux argued that there is no "visible" or "visual" limitation on "knit lines" anywhere in the claims or specifications of either patent. Thus, Electrolux contends that it would plainly be inappropriate to import a "visibility" limitation into the construction

of "knit lines." While Electrolux concedes that "knit lines" *may* be visible, Electrolux argues that nothing in the patent requires that they be so construed.

iii. Analysis. The court, once again, begins its construction of this term with the points of agreement between the parties. The parties agree that "knit lines" are formed when two flow fronts of molten plastic meet during the molding operation, for example, when the molten plastic flows around the core pins. *Compare* Maytag's definition ("a line that [is] caused by the meeting of two flow fronts during the molding operation"), *with* Electrolux's definition ("lines that . . . form when the molten plastic flows around the core pins and then solidifies"). Maytag's definition is insufficiently specific in this regard, because it does not explain that the "flow fronts" are the flow fronts of *molten plastic*, where plastic is the material from which the patented washing machine baskets are made. On the other hand, Electrolux's definition is too specific in this regard, in that it suggests that "knit lines" are *only* formed by the flow of the molten plastic around the core pins, where there is no such limitation to be found anywhere in the patent, and when it is conceivable that "knit lines" could be formed elsewhere in the plastic washing machine basket, as the mold fills, even if there is only a single nozzle **116** to inject molten plastic into the mold. Thus far, therefore, the court construes "knit lines" to be "lines formed when two flow fronts of molten plastic meet during the molding operation."

The crux of the parties' dispute over the construction of this term, however, is whether or not the "knit lines" must be "visible." While the parties appear to agree that it is impossible, with present technology, to eliminate "knit lines" entirely, Maytag contends that only the "visible" knit lines matter to the claimed invention. It is true that the "Background To The Invention" states, "Knit lines cause reduced structural integrity and *visually* indicate defects." The '909 patent, col. 1, *ll*. 24-25 (emphasis added). However, this statement refers to what "knit lines" *visually indicate*, not to whether "knit

lines" are themselves only significant if they are "visible." Indeed, the statement also recognizes that "knit lines cause reduced structural integrity," without any limitation on whether or not the "knit lines" are visible. Furthermore, nowhere else in the patent specification or claims is there any limitation of the "knit lines" in question to "visible knit lines," even where the patent specification or claims refer to "undesirable knit lines," *see, e.g.*, *id.* at col. 1, *ll.* 36, 44-45, or to the claimed invention of a plastic washing machine basket that is "without knit lines" or "lacks knit lines." *Id.* at col. 1, *l.* 48 & Claim 26. While it is possible, even probable, that the patentee's focus was on "visible" knit lines, because it is or may be impossible, with present technology, to eliminate "invisible" knit lines, that is not what the patentee actually claimed. If the court were to construe "knit lines" everywhere the term appears in the patent to mean only "visible knit lines," the court would be grossly modifying what was claimed.

Finally, while it may be undisputed—and even true—that "knit lines cause reduced structural integrity and visually indicate defects," *see id.* at col. 1, *ll.* 24-25, the court finds it unnecessary and inappropriate to import such a limitation into the construction of "knit lines." Even without the possible inappropriate and incorrect suggestion that this statement means that only "visible" knit lines matter in the '909 patent, importation of such a limitation would improperly import or read a limitation from the specification into construction of the claim term. *See Playtex Prods., Inc.*, 400 F.3d at 906 ("The court must take care in its analysis, when locating in the written description the context for a disputed term, not to import a limitation from that written description. It must use the written description for enlightenment and not to read a limitation from the specification [into the construction of the term].") (citing *Comark Comms.*, 156 F.3d at 186-87). Finally, the consequences of refusing to read a "visible" limitation into the construction of "knit lines"—for example, for purposes of Electrolux's "enablement" defense—are

irrelevant to claim interpretation. *See, e.g., PPG Indus.*, 156 F.3d at 1355 (the inevitable imprecision of patent claims "does not mean . . . that a court, under the rubric of claim construction, may give a claim whatever additional precision or specificity is necessary to facilitate a comparison between the claim and the accused product"); *see generally Markman*, 517 U.S. 370 (patent claim construction is a question of law for the court that is separate from determination of whether infringement has occurred). Thus, "visibility" of the "knit lines" is simply not part of the proper construction of the term.

Therefore, the court construes the term "knit lines" to mean "lines formed when two flow fronts of molten plastic meet during the molding operation."

d. The disputed term in Claim 27: "Burrs at the apertures"

i. Claim language. The next claim term in the '909 patent that the court finds is actually "in dispute" at this time is in Claim 27. That disputed claim term is "burrs at the apertures." Claim 27, with the disputed term highlighted, states the following:

> **27.** The plastic washing machine basket of claim **25**, wherein the basket lacks *burrs at the apertures*.

The '909 patent, Claim 27 (emphasis added).

ii. The parties' definitions and arguments. The parties' proffered definitions of this term are the following, with bold font indicating differences between their definitions. Again, the authority on which each party relies for its construction is shown just below that party's definition.

"BURRS AT THE APERTURES"	
Maytag's Definition	**Electrolux's Definition**
"a **rough, sharp or jagged edge or area** remaining on the **inner surface** of the sidewall after holes have been **formed by perforating, cutting or drilling**"	"**irregularities, roughness or projections**, where the apertures are **formed**, on the **inner or outer surface** of the sidewall of the plastic washing machine basket"
Maytag's Authority	**Electrolux's Authority**
'909 patent, col. 1, ll. 26-33; col. 6, ll. 64-67; dictionary definition of "burr"	'909 Patent at col. 1, line 29; col. 6, lines 64-66; dictionary definition of "burr"

In its initial *Markman* brief, Maytag asserts that the invention in the '909 patent eliminates the problems with burrs that form on the inside surface of the washing machine basket, when using other production methods and designs, by forming the apertures in the basket during the molding operation, instead of in a subsequent manufacturing step requiring perforation of the basket. Maytag contends that its construction of "burrs at the apertures" is consistent with the only references to such "burrs" in the specification, which identifies them as sharp or jagged edges on the inner surface of the sidewall formed by perforating the apertures in a post-molding manufacturing step. Maytag contends that Electrolux's construction is strained, because it arguably would include any irregularity on the inner or outer surface of the sidewall, including irregularities that have nothing to do with punching or drilling holes. Thus, Maytag contends that Electrolux has construed the claim term without regard for the meaningful context provided by the patent specification. Maytag also argues that Electrolux's construction makes Claim 27 a nullity, if "burrs" means *any* irregularity on the surface of the basket. Maytag contends that

Electrolux's construction also flies in the face of extrinsic testimony from Electrolux's own witnesses.

Electrolux, on the other hand, contends in its initial brief that there are only two references to "burrs" in the patent, one in Claim 27, and one in the Background Of The Invention, neither of which provides any guidance, and that there is little support for a meaning for this term in the file history. Even so, Electrolux contends that its construction is consistent with commonly understood meanings of the term drawn, for instance, from standard dictionary definitions of "burrs." Electrolux contends that Maytag's construction is faulty, because it attempts to limit the location of the "burrs" to the inner surface of the sidewall, which is not warranted by the claim language or specification, and it attempts to limit the meaning of "burrs" to rough edges formed by perforating, cutting, or drilling, when such limitations do not exist in either the patent or the understanding in the art.

In its rebuttal brief, Maytag argues that Electrolux's construction misses the mark for two reasons: it improperly includes *all* irregularities, roughness, and projections, which ignores the context of the term in the patent and the understanding of one of ordinary skill in the art, because *all* molded baskets, whatever method is used to mold them, would necessarily have some type of irregularity, roughness, or projection, but what matters is that the *claimed* burrs are those discussed in the specification as formed in the prior art by punching or drilling. In its rebuttal brief, on the other hand, Electrolux reiterates its arguments that Maytag's construction improperly limits the manner in which the burrs are formed and the location of such burrs. Electrolux admits that the part of the Background Of The Invention cited by Maytag supports the idea that a burr *can* be formed by perforation, but argues that this part does not stand for the proposition that a burr *must* be formed in that manner. Indeed, Electrolux contends that Maytag is misconstruing this term in the same way that Maytag accused Electrolux of misconstruing "grooves" by

importing a process limitation into the claim. Electrolux also reiterates that nothing in Claim 27 or the specification imposes any limitation on the location of the burrs to the *inner* surface of the washing machine basket. Electrolux also contends that additional parts of the testimony of its witnesses not submitted by Maytag actually undercut Maytag's construction.

iii. Analysis. Beginning with the words of Claim 27, *see Nystrom*, 424 F.3d at 1142 (construction begins with the words of the patent); *Biagro*, 423 F.3d at 1302 (same), it is plain that the claim language itself does not support a limitation on the *location* of the "burrs" to the *inner surface* of the washing machine basket, as Maytag asserts, or even to the *inner or outer surfaces* of the washing machine basket, as Electrolux contends. Rather, the claim specifies that the burrs are located "at the apertures." *See* the '909 patent, Claim 27. The "apertures" in question are, in turn, those defined in Claim 25, the independent claim from which Claim 27 depends. Claim 25 claims "said sidewall including inner and outer surfaces having *spaced apertures extending therethrough* with the outer surface being beveled at the apertures." *Id.*, Claim 25 (emphasis added). Thus, while the apertures pass through the inner and outer surfaces of the sidewall, *id.*, the "burrs" in Claim 27 are "*at* the apertures," rather than *on* the inner or outer surfaces of the sidewall. *Id.*, Claim 27 (emphasis added). This location of the "burrs," specifically, "*at* the apertures," seems to the court to be unambiguous, so that, to construe it further might be to construe the claim term with greater specificity than is warranted by the claim language. *See PPG Indus.*, 156 F.3d at 1355 (the task of the court is to "define[ ] the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction").

Turning to the specification, *see Phillips*, 415 F.3d at 1314-16 (the specification remains of "central importance" to determining the proper construction of the term and

may even be "dispositive"), the court finds that the one reference to the "burrs" in the Background Of The Invention[11] is not to the contrary concerning the *location* of the "burrs." That reference states, "Alternatively, it has also been proposed to mold a plastic washing machine basket as a unitary structure and then perforate the holes during a subsequent manufacturing step. This method leaves burrs and sharp edges that would result in damage to garments washed in the basket." '909 patent, col. 1, ll. 26-33. This snippet from the Background Of The Invention is silent about the location of the "burrs"; it certainly does not suggest that the "burrs" are located only on the inner surface of the sidewall, or on both inner and outer surfaces. Plainly, it does not state or contradict the location of the "burrs" as "at the apertures," which is the location expressly and unambiguously claimed in Claim 27. Thus, the court finds nothing in the intrinsic evidence to contradict its construction of the location of the "burrs" as "at the apertures."

Therefore, based on the plain language of the claim and the little insight provided by the specification, the court concludes that the "burrs" are unambiguously claimed to be located "at the apertures."

Unfortunately, the court finds that the language of Claim 27, and the language of the independent claim from which it depends, Claim 25, do not shed any light on the meaning of "burrs." The court also finds that the specification is largely unhelpful as to the *nature* of the "burrs," but not because it is merely silent on the question. Electrolux is correct that the reference to "burrs" in the Background Of The Invention merely suggests that "perforat[ing] holes . . . leaves burrs," but it does not suggest that "burrs" mean *only* flaws left by "perforat[ing] holes." Rather, in context, this reference to "burrs"

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[11]The court will assume, for the sake of argument, as Maytag has, that the Background Of The Invention is part of the "specification" of the *invention*, just as the Detailed Description Of The Invention clearly is.

in the Background Of The Invention indicates that "burrs" are *one kind of flaw* left by "perforat[ing] holes"; another is "sharp edges." '909 patent, col. 1, ll. 26-33. Furthermore, to read "burrs" as limited to flaws created by "perforat[ing] holes," if one could read the reference in the Background Of The Invention that way, would also be to import, improperly, a limitation from the specification into the claim term. *See Playtex Prods., Inc.*, 400 F.3d at 906 ("The court must take care in its analysis, when locating in the written description the context for a disputed term, not to import a limitation from that written description. It must use the written description for enlightenment and not to read a limitation from the specification [into the construction of the term]."") (citing *Comark Comms.*, 156 F.3d at 186-87). Therefore, based on the plain language of the claim and the little insight provided by the specification, the court concludes the "burrs" are *not* formed exclusively by "perforating holes," such that any reference to formation only by "perforating" is inappropriate.

Thus, the remaining issue is, what is the *nature* of a "burr," if it is not a flaw formed exclusively by "perforating"? The court can find nothing, and the parties have pointed to nothing, in the words of Claim 27 or any other claim in the patent that illuminates the meaning of "burrs." *See Nystrom*, 424 F.3d at 1142 (construction begins with the words of the patent); *Biagro*, 423 F.3d at 1302 (same). The few references in the specification cited by the parties are only slightly more illuminating. *See Phillips*, 415 F.3d at 1314-16 (the specification remains of "central importance" to determining the proper construction of the term and may even be "dispositive"). What the reference to "burrs" in the Background Of The Invention may suggest is that "burrs" means something *different* from "sharp edges," or the reference to "burrs *and* sharp edges" left by perforation would be redundant. '909 patent, col. 1, ll. 29 (emphasis added). The other reference cited by the parties, this one from the Detailed Description, states, "[S]ince holes

44 are recessed within the teardrop-shaped grooves **50**, any edges on the holes **44** will be prevented from snagging clothes placed in basket **2**." The '909 patent, col. 6, *ll*. 64-67. However, this reference does not mention any kind of flaw that could be taken to mean a "burr," because it simply refers to "any edges on the holes."

Having exhausted the possibilities of intrinsic evidence, the court turns to standard dictionary definitions for assistance. *See Free Motion Fitness, Inc.*, 423 F.3d at 1348 ("*Phillips* confirms that courts may '"rely on dictionary definitions when construing claim terms"' and that '[d]ictionaries . . . are often useful to assist in understanding the commonly understood meaning of words.'") (quoting *Phillips*, 415 F.3d at 1322, in turn quoting *Vitronics Corp.*, 90 F.3d at 1584 n.6). Indeed, the court finds that it is possible to construe "burrs" simply "by applying 'the widely accepted meaning of [this] commonly understood word[ ]." *Network Commerce, Inc.*, 422 F.3d at 1359. Maytag nominates the following definition from WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY, 300: "a thin ridge or area of roughness produced in cutting or shaping metal (as in drilling, turning or blanking)." Electrolux nominates the following definition from AMERICAN HERITAGE DICTIONARY, 258, definition 1, n.1: "a rough edge or area remaining on material, such as metal, after it has been cast, cut, or drilled." These definitions do not differ significantly, but neither do they directly support the respective constructions of "burrs" offered by the parties citing them. Nowhere in Maytag's dictionary definition is there any reference to a "burr" as a "sharp or jagged edge," as in Maytag's proffered construction, and nowhere in Electrolux's dictionary definition is there reference to "burrs" as "irregularities . . . or projections," as in Electrolux's proffered construction.

What both dictionary definitions *do* support, however, is the construction of "burrs" as "rough areas . . . remaining after material is shaped, cut, cast, or drilled." The court does not believe that adopting such a construction of "burrs" would constitute giving that

term "its broadest dictionary definition or the aggregate of multiple dictionary definitions," but would, instead, be "the most appropriate [dictionary] definition" after "scrutiniz[ing] the intrinsic evidence." *Free Motion Fitness, Inc.*, 423 F.3d at 1349 (citing *Phillips*, 415 F.3d at 1320-24). Specifically, this construction is not an "aggregate" of the parties' nominated definitions, but a recognition of the extent to which those nominated definitions overlap. For example, both nominated definitions refer to "rough areas." Although both nominated definitions then also identify a particular kind of "rough area," either a "thin ridge" or "a rough edge," such specificity is not warranted by any language in Claim 27 or elsewhere in the patent. *See PPG Indus.*, 156 F.3d at 1355 (the task of the court is to "define[ ] the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction"). Both nominated definitions also refer to the "rough area" as "produced in" or "remaining on" material; thus, both suggest results of a formation process, albeit one from the "cause" perspective (Maytag's nominee from WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY, 300: "a thin ridge or area of roughness *produced* in cutting or shaping metal (as in drilling, turning or blanking) (emphasis added)) and one from the "effect" perspective (Electrolux's nominee from AMERICAN HERITAGE DICTIONARY, 258, definition 1, n.1: "a rough edge or area *remaining on* material, such as metal, after it has been cast, cut, or drilled" (emphasis added)). Similarly, "shaping" includes the other dictionary identifications of the method of producing the "burrs," specifically, "turning or blanking," "drilling," "cutting," or "casting." "Shaping" also includes the method of creating "burrs" in the sole reference to "burrs" in the Background Of The Invention ("perforating"), as well as the claimed method of forming washing machine baskets in the patent ("molding"). For the same reason, including "drilling" and "cutting" in the construction is appropriate, because those terms are also consistent with the method of creating "burrs" in the sole

reference to "burrs" in the Background Of The Invention ("perforating"), while including "casting" in the construction is appropriate, because it is consistent with the claimed method of forming washing machine baskets ("molding").

Maytag's concern that construction of "burrs" simply as "rough areas" could encompass *any* irregularities on the surface of the washing machine basket is unfounded. That concern is eliminated by the language of the claim itself, which specifies that the "burrs" (*i.e.*, "rough areas remaining after material is shaped, cut, cast, or drilled") are "at the apertures" through the sidewall of the washing machine basket, *see* the '909 patent, Claim 27 ("burrs at the apertures"); *see also id.*, Claim 25 (the apertures are through the sidewall), not elsewhere on the inner or outer surfaces of the washing machine basket.

Therefore, the court concludes that the appropriate construction of "burrs at the apertures," in light of the intrinsic evidence and extrinsic standard dictionary definitions, is the following: "Rough areas at the apertures remaining after material is shaped, cut, cast, or drilled."

2. Disputed terms in the '809 patent

The court now turns to disputed terms in the '809 patent, the "process" patent, which is a companion to, indeed, a division of, the '909 "product" patent. Five terms in three different claims in this patent are "in dispute." The court will consider these terms in turn.

a. The first disputed term in Claim 7: "A base wall including a peripheral portion from which extends an annular sidewall that diverges radially outwardly to a terminal edge"

i. Claim language. The first term in the '809 patent that the court must construe is found in Claim 7. The disputed term in this claim is "a base wall including a

peripheral portion from which extends an annular sidewall that diverges radially outwardly to a terminal edge." Claim 7, with the disputed term italicized, states the following:

> **7**. A method of making an integral, smooth and uniformly constructed plastic washing machine basket having *a base wall including a peripheral portion from which extends an annular sidewall that diverges radially outwardly to a terminal edge* in an apparatus including a mold core, cavity sidewall members spaced about the mold core which carry core pins each having a beveled tip portion adapted to abut the mold core during a molding operation and a cavity cover member spaced about an end of the mold core and abutting the cavity sidewall members so as to define a cavity between the mold core and both the cavity cover member and the cavity sidewall members comprising:
>
> injecting a plastic material to fill the cavity while flowing around the beveled tip portion of each of the core pins to form a plastic washing machine basket having sidewalls provided with a plurality of spaced beveled apertures; and
>
> ejecting the washing machine basket from the apparatus by separating the mold core and cavity cover member and shifting the cavity sidewall members away from the mold core.

The '809 patent, Claim 7 (emphasis added).

ii. The parties' definitions and arguments. The parties' proffered definitions of this term are shown below, with bold font indicating differences between their definitions. Also, the authority on which each party relies for its definition is shown just below that party's definition.

"A BASE WALL INCLUDING A PERIPHERAL PORTION FROM WHICH EXTENDS AN ANNULAR SIDEWALL THAT DIVERGES RADIALLY OUTWARDLY TO A TERMINAL EDGE"	
Maytag's Definition	**Electrolux's Definition**
"A base wall including a peripheral portion from which extends an annular sidewall **having a radius measured from the vertical center axis to the sidewall that increases from the base wall to the terminal edge**"	"the **bottom wall** of the washing machine basket is the base wall; the peripheral portion of the base wall is the **outside edge of the bottom wall** of the washing machine basket; the sidewall of the washing machine basket is **disposed from a central axis a greater degree at the top edge than at the bottom; the terminal edge is the top edge of the sidewall**"
Maytag's Authority	**Electrolux's Authority**
'809 patent, Fig. 2; col. 2, ll. 8-15; col. 4, ll. 22-25; col. 6, ll. 3-44; claims 24, 29 and 34; '909 patent claims 11, 12, and 18; dictionary definitions of "diverge" and "radial"	'809 Patent at Fig. No. 2, No. 5 (base wall); Fig. 2, No. 10 (peripheral portion); Fig. 2, No. 8 (sidewall); Fig. 2 (radially outwardly); Fig. 1, No. 36 and Fig. 2, No. 36 (terminal edge); col. 2, lines 9-15 and lines 48-50; col. 3, lines 8-9, lines; col. 6, lines 36-42; dictionary definitions of "radial

The parties agree that the "heavy lifting" on this claim term has already been done, because the parties have already argued, and at this point, the court has already construed "annular sidewall that diverges radially outwardly to a terminal edge." *See supra*, beginning on page 62. The parties also argued the proper construction of other parts of this claim term, but in reference to claim terms that the court has held are not "in dispute" at this time. Therefore, while the parties' work was done with briefing of other claim terms, the court must still consider for the first time the parties' constructions of the

constituent terms "base wall," "peripheral portion [of the base wall]," and "terminal edge."

Maytag did not address these remaining constituent terms in its initial brief, because it took the position that they were not "in dispute" for purposes of infringement. In its opening brief, however, Electrolux construes "base wall" as "the bottom of the washing machine basket," albeit in reference to Claims 23 and 25 of the '909 patent. Electrolux's primary argument is that the drawings in both the '909 patent and the '809 patent depict the "base wall" as the bottom of the washing machine basket. Also in reference to Claims 23 and 25 of the '909 patent, Electrolux argues that "peripheral portion [of the base wall]" means the "outside edge of the bottom wall of the washing machine basket." Again, Electrolux contends that the drawings with the patents support its construction. On the other hand, Electrolux contends that Maytag's construction of this term (as "a portion of the base wall located away from the center of the base wall") is overly complicated. Finally, in its opening brief, again in reference to Claim 25 of the '909 patent, Electrolux argues that "terminal edge" means the "top edge of the sidewall." Electrolux again asserts that the illustrations in the patents support its construction, while Maytag's definition (which refers to the "access opening") is overly complicated.

In its rebuttal brief, Maytag takes issue with Electrolux's definition of "base wall," because Maytag argues that the pertinent patent claims and parts of the specification do not teach a "top" and "bottom" orientation of the washing machine basket. As to "peripheral portion [of the base wall]," Maytag contends that Electrolux is improperly construing "portion" to mean "edge." While Maytag concedes that the peripheral portion includes the base wall's edge, Maytag contends that it includes more than just the edge, indeed, the rest of the outside portion of the base wall—apparently meaning by "outside" any portion not in the center of the base wall. Thus, Maytag contends that Electrolux's construction

is too narrow. Maytag also contends that use of "edge" in other patent claims means that the patentee knew how to claim an "edge" when one was intended. Finally, Maytag asserts that "terminal edge" does not mean merely "top edge," again because there is no "top" and "bottom" orientation to the washing machine basket to be drawn from the patent claims; rather, Maytag contends that "terminal edge" simply means what it plainly states, a "terminal edge."

In its surrebuttal brief, Electrolux contends that "base wall" and "terminal edge" are as depicted in the patent illustrations, regardless of their orientation as "bottom" or "top." As to "peripheral portion [of the base wall]," Electrolux contends that Maytag's definition is hopelessly vague, because it includes any and all portions of the base wall that are not in the center of the base wall. Thus, Electrolux contends that Maytag's construction is broader than the claim language.

iii. Analysis. In its construction of the disputed term in Claim 25 of the '909 patent above, the court concluded, *inter alia*, that the two ends of the washing machine basket are properly defined as the "base wall" and the "open end," respectively. *See supra*, page 66. Implicit in that conclusion was a finding that the court now confirms explicitly: "base wall" is unambiguously the "closed end" of the washing machine basket and no further construction of the term—for example, to indicate "up" or "down" orientation of the basket by referring to the "closed end" as the "bottom"—is required. In the same discussion leading to that conclusion, the court also found that the "terminal edge" is not the "top edge of the sidewall," but the "edge of the sidewall at the open end of the washing machine basket."

These prior conclusions leave for resolution here only the proper construction of the term "peripheral portion [of the base wall]." Unfortunately, neither the plain language of the claims in which "peripheral portion [of the base wall]" appears, *see Nystrom*, 424 F.3d

at 1142 (construction begins with the words of the patent); *Biagro*, 423 F.3d at 1302 (same), nor the portions of the specification cited by the parties, *see Phillips*, 415 F.3d at 1314-16 (the specification remains of "central importance" to determining the proper construction of the term and may even be "dispositive"), provide any real illumination for the meaning of this term, because all of the cited portions merely repeat the term.

Consequently, the court turns, once again, to standard dictionary definitions for assistance. *See Free Motion Fitness, Inc.*, 423 F.3d at 1348 ("*Phillips* confirms that courts may '"rely on dictionary definitions when construing claim terms"' and that '[d]ictionaries . . . are often useful to assist in understanding the commonly understood meaning of words.'") (quoting *Phillips*, 415 F.3d at 1322, in turn quoting *Vitronics Corp.*, 90 F.3d at 1584 n.6). Indeed, the court again finds that it is possible to construe "peripheral portion" simply "by applying 'the widely accepted meaning of commonly understood words." *Network Commerce, Inc.*, 422 F.3d at 1359. "Peripheral" is defined to mean, for example, "of, relating to, or involving, or forming a periphery or surface part." *See* MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY (10th ed. 1995) (definition 1 a of "peripheral *adj*"). "Periphery," in turn, is defined as "the perimeter of a circle or other closed curve: *also*: the perimeter of a polygon," as "the external boundary or surface of a body," and as "the outward bounds of something as distinguished from its internal regions or center: CONFINES," and finally, as "an area lying beyond the strict limits of a thing." *Id.* (definitions of "periphery *n*"). From this standard definition, it is apparent that Maytag's assertion that "peripheral portion" means any and all portions of the base wall that are not in the center of the base wall is simply too broad. At a minimum, "peripheral portion" means "*the outward bounds*" of the base wall, "as distinguished from its internal regions," not merely any region away from the center. *Id.* (emphasis added). Moreover, a "peripheral portion" is at the "perimeter" of something.

Here, where the claims and specification also identify the thing at the "peripheral portion" of the base wall as an "annular sidewall," *i.e.*, as a "ring-shaped sidewall," it is apparent that this circular sidewall is at the "perimeter" of the circular base wall. This construction is further reinforced by the fact that, in the related "product" patent, the base wall is, itself, claimed to be "substantially circular," such that it has a "perimeter." *See* the '909 patent, Claim 23 (claiming "A plastic washing machine basket comprising . . . a *substantially circular base wall* having a peripheral portion") (emphasis added).

Therefore, the court construes "peripheral portion [of the base wall]" to mean the "perimeter" of the base wall. Taking the constructions of the constituent terms together, the first disputed claim term in Claim 7 of the '809 patent, "a base wall including a peripheral portion from which extends an annular sidewall that diverges radially outwardly to a terminal edge," is construed as "a base wall including a perimeter from which extends a sidewall shaped like a ring that continuously increases in radius from the central axis moving from the base wall to the edge of the sidewall at the open end of the washing machine basket."

b. The second disputed term in Claim 7: "Cavity cover member spaced about an end of the mold core"

i. Claim language. The second disputed term in Claim 7 of the '809 patent is "cavity cover member spaced about an end of the mold core." In its tentative draft ruling, provided to the parties prior to the *Markman* hearing, the court concluded that this term, among many others, was not "ripe" for construction, because Electrolux had not shown that the term was "in dispute" for infringement or for any other purpose. However, following the hearing, the court revised that conclusion, and found above, in Section II.A.1.b., beginning on page 36, that this term is also "in dispute" at this time for purposes of infringement. Therefore, the court must now construe this term, as well.

Claim 7, with the disputed term italicized, states the following:

> **7**. A method of making an integral, smooth and uniformly constructed plastic washing machine basket having a base wall including a peripheral portion from which extends an annular sidewall that diverges radially outwardly to a terminal edge in an apparatus including a mold core, cavity sidewall members spaced about the mold core which carry core pins each having a beveled tip portion adapted to abut the mold core during a molding operation and *a cavity cover member spaced about an end of the mold core* and abutting the cavity sidewall members so as to define a cavity between the mold core and both the cavity cover member and the cavity sidewall members comprising:
>
> injecting a plastic material to fill the cavity while flowing around the beveled tip portion of each of the core pins to form a plastic washing machine basket having sidewalls provided with a plurality of spaced beveled apertures; and
>
> ejecting the washing machine basket from the apparatus by separating the mold core and cavity cover member and shifting the cavity sidewall members away from the mold core.

The '809 patent, Claim 7 (emphasis added).

ii. The parties' definitions and arguments. The parties' proffered definitions of this term are shown below, with bold font indicating differences between their definitions. Also, the authority on which each party relies for its definition is shown just below that party's definition.

"CAVITY COVER MEMBER SPACED ABOUT AN END OF THE MOLD CORE"	
Maytag's Definition	**Electrolux's Definition**
"a **section** of the mold **extending about and spaced from an end of the mold core**"	"a **cover** that is **adapted to abut the cavity sidewall members when** the molding apparatus is in a **closed** mold position and which is **spaced from the cavity sidewall members when** the molding apparatus is in an **open** mold position"
Maytag's Authority	**Electrolux's Authority**
'809 patent, Figs. 3 & 4; col. 3, ll. 3-57; col. 5, ll. 7-30; col. 5, ll. 25-30 col. 5, ll. 36-40; Abstract; claims 1, 7, and 11.	*See* '809 Patent at Fig. 3, No. 102; Fig. 4, No. 102; col. 5, lines 8-13.

Maytag did not offer any argument in support of its construction of this term in its opening brief, because Maytag asserted that it is not in dispute for infringement purposes. However, in its rebuttal brief, Maytag argued that this term should be left to its plain and ordinary meaning, as informed by the patent specification. Maytag also argued that Electrolux's proposed definition is flawed, because it renders claim language superfluous and injects limitations from the preferred embodiment of the specification into the claims. Somewhat more specifically, Maytag asserts that Electrolux's insertion of "to abut the cavity sidewall members when the molding apparatus is in a closed position" is improper, because Claim 7 already includes essentially this same language, so that Claim 7 is rendered partially superfluous. Maytag also asserts that Electrolux's insertion of "is spaced from the cavity sidewall members when the molding apparatus is in an open mold position" inserts language not in Claim 7, but in Claim 11, so that Electrolux is attempting to import limitations from one claim into another, which violates the requirement that

claims having different terms are presumed to have different scopes. Moreover, Maytag points out that Electrolux acknowledges that its proposed construction comes directly from the specification, but importing limitations from the specification that are not found in the claim is not appropriate.

In its rebuttal brief, Electrolux contends that its construction of this term is proper, because it fits the illustrations and specification, which show that the "cavity cover member" covers a cavity, not just that it is any end of the cavity, whether or not it covers an opening, as Maytag's definition suggests. Electrolux also contends that the specification and claims clearly define the "cavity cover member" with reference to its location in the "open" and "closed" mold positions and require that the "cavity cover member" touch the sidewall members only in the "closed" mold position, but not touch them when it is in the "open" mold position.

In its surrebuttal brief, Maytag asserts that this term need not be construed, because Electrolux's representative, Michael Griffith, admitted that the accused process includes this limitation. Electrolux, however, contends that this term is in dispute and that Maytag's criticism of Electrolux's definition is wrong, because the specification explicitly defines "cavity cover member" in the context of the "open" and "closed" mold positions, citing the '809 patent, col. 5, *ll.* 7-20. Electrolux asserts that its definition incorporates this definition from the specification. Electrolux also asserts that claim differentiation does not require the court to ignore the limitations on a term that are apparent from the specification.

The parties also addressed the construction of this term at the *Markman* hearing oral arguments. Electrolux again asserted that its definition is correct, because it is drawn straight from the specification. Electrolux also argued that it is not enough to note differences among claims, because differences may cover the same thing, if they are

consistent with the specification. Maytag countered that the specification discloses only the preferred embodiment, not a definition of all claim terms for all purposes, such that the specification should not be imported into the claim definition.

iii. Analysis. Beginning once again with the words of Claim 7, *see Nystrom*, 424 F.3d at 1142 (construction begins with the words of the patent); *Biagro*, 423 F.3d at 1302 (same), it is plain from the claim language itself that the "cavity cover member" is part of the apparatus for molding a plastic washing machine basket. *See* the '809 patent, Claim 7 (claiming "[a] method of making [a] . . . plastic washing machine basket . . . in an apparatus including a mold core, cavity sidewall members . . . , and *a cavity cover member*. . . .") (emphasis added). It is also plain that the claim language itself states that the "cavity cover member" is (1) "spaced about an end of the mold core," and (2) "abut[s] the cavity sidewall members," with the result (3) that the "cavity cover member" "define[s] a cavity between the mold core and both the cavity cover member and the cavity sidewall members." The '809 patent, Claim 7. Maytag's definition is, thus, incomplete, in that it leaves out the second requirement that the cavity cover member abut the cavity sidewall members, as well as the third requirement that the cavity cover member define a cavity. Maytag's definition is also erroneous—or at least misleading—because it transforms the claim language "*spaced about* an end of the mold core" into "*extending about* and *spaced from* an end of the mold core." The court finds nothing ambiguous about "spaced about" that warrants redefining it as "extending about and spaced from," even assuming that the proffered redefinition is accurate.

Similarly, Electrolux's definition does not comport with the claim language, because it imports limitations from the specification concerning "open" and "closed" mold positions that are found nowhere in Claim 7. Rather, such limitations are expressly claimed in Claim 11. Thus, while Electrolux's definition clearly "aligns" with the

description in the specification—indeed, is drawn directly from the specification—it does not "stay[ ] true to the claim [7] language." *Phillips*, 415 F.3d at 1316 (quoting *Renishaw PLC*, 158 F.3d at 1250); *see also Nystrom*, 424 F.3d at 1142 (quoting this portion of *Phillips*). It also improperly imports into Claim 7 limitations subsequently claimed in Claim 11, which would render Claim 11 superfluous. *See Merck & Co.*, 395 F.3d at 1372 ("A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so."); *Power Mosfet Techs., L.L.C.*, 378 F.3d at 1410 (stating that interpretations of claims rendering claim terms superfluous is generally disfavored).

Indeed, the court concludes that the claim term "cavity cover member," in the context of Claim 7, is unambiguous: It means "a part of the apparatus for molding a plastic washing machine basket that is spaced about an end of the mold core and abutting the cavity sidewall members so as to define a cavity between the mold core and both the cavity cover member and the cavity sidewall members." This definition is not only consistent with the language of Claim 7, but consistent with the specification, to the extent that Claim 7 claims particular limitations for the "cavity cover member" among other limitations stated in the specification and claimed elsewhere in the claims of the '809 patent. *See Phillips*, 415 F.3d at 1314-16 (the specification remains of "central importance" to determining the proper construction of the term and may even be "dispositive"). Specifically, the specification identifies the "cavity cover member" as part of the molding apparatus, *see* the '809 patent, col. 3, *ll.* 39-44 ("The molding apparatus **60** further includes . . . a cavity cover member **102**. . . ."), that is spaced about the end of the mold core, *see id.* at col. 3, *ll.* 44-45 ("a cavity cover member **102** . . . extending about an end of the mold core **90**. . . ."), that abuts the cavity sidewall members, *see id.* at col. 3, *ll.* 44-47 ("a cavity cover member **102** . . . abutting cavity sidewall members **99**. . . ."); col. 5, *ll.* 7-10 ("Cavity cover member **102** includes an annular flange portion

202 which is adapted to abut cavity sidewall members **99**. . . ."), and that, as a result, defines a cavity between the mold core and both the cavity cover member and the cavity sidewall members. *See id.* at col. 3, *ll*. 47-53 (defining "a second space therebetween" the cavity cover member and the mold core and explaining that plastic material is injected "within the spaces between mold core **90** and both cavity cover member **102** and cavity sidewall members **99**"); col. 5, *ll.* 36-39 (also explaining that plastic material is injected "into the spaced defined between the mold core **90** and both cover insert **105** of cavity cover member **102** and cavity sidewall members **99**").

In short, the court finds that "cavity cover member" in Claim 7 unambiguously means "a part of the molding apparatus that is spaced about an end of the mold core and abutting the cavity sidewall members so as to define a cavity between the mold core and both the cavity cover member and the cavity sidewall members." No further construction of this term is required.

c. The third disputed term in Claim 7: "Ejecting the washing machine basket . . . by separating the mold core and cavity cover member and shifting the cavity sidewall member away from the mold core"

i. Claim language. The third disputed claim term in Claim 7 of the '809 patent is "ejecting the washing machine basket . . . by separating the mold core and cavity cover member and shifting the cavity sidewall member away from the mold core." Claim 7, with the disputed term italicized, states the following:

> **7**. A method of making an integral, smooth and uniformly constructed plastic washing machine basket having a base wall including a peripheral portion from which extends an annular sidewall that diverges radially outwardly to a terminal edge in an apparatus including a mold core, cavity sidewall members spaced about the mold core which carry core pins each having a beveled tip portion adapted to abut the mold core during a molding operation and a cavity cover

> member spaced about an end of the mold core and abutting the cavity sidewall members so as to define a cavity between the mold core and both the cavity cover member and the cavity sidewall members comprising:
>
> injecting a plastic material to fill the cavity while flowing around the beveled tip portion of each of the core pins to form a plastic washing machine basket having sidewalls provided with a plurality of spaced beveled apertures; and
>
> *ejecting the washing machine basket* from the apparatus *by separating the mold core and cavity cover member and shifting the cavity sidewall members away from the mold core*.

The '809 patent, Claim 7 (emphasis added).

ii. The parties' definitions and arguments. The parties' proffered definitions of this term are shown below, with bold font indicating differences between their definitions. Also, the authority on which each party relies for its definition is shown just below that party's definition.

"EJECTING THE WASHING MACHINE BASKET . . . BY SEPARATING THE MOLD CORE AND CAVITY COVER MEMBER AND SHIFTING THE CAVITY SIDEWALL MEMBERS AWAY FROM THE MOLD CORE"	
Maytag's Definition	**Electrolux's Definition**
"**preparing** the formed plastic washing machine basket **for removal** from the mold **by performing steps including at least separating the mold core and the cavity cover member and moving the cavity sidewall member away from the mold core**"	"**Removing** the formed plastic washing machine basket from the mold core **by the operation of moving the cavity cover member away from the mold core and shifting the sidewall members**"[12]
Maytag's Authority	**Electrolux's Authority**
'809 patent, col. 6, ll. 3- 48; claims 8 & 9; col. 2, ll. 15-23.	'809 Patent at col. 6, lines 3-13 and lines 17-23.

In its initial brief, Maytag contends that the patent specification "sets the stage" for what is intended by "ejecting" at col. 6, *ll.* 3-48. Specifically, Maytag contends that, based on this portion of the specification, "ejecting" refers to the "initial ejection phase," in which the cavity cover member shifts away from the cavity sidewall members, and the cavity sidewall members also shift relative to the mold core, at which time a stripper ring pushes on one end of the basket until it reaches the "ejection position" shown in Figure 4, reproduced above at page 18. Only thereafter, in the second phase of "ejection," is the basket removed from the molding apparatus by a robot arm or similar device. Thus, Maytag contends that the patent specification makes a clear distinction between "ejecting"

[12]Again, this is the statement of Electrolux's construction of this claim term in its initial *Markman* brief, rather than the somewhat different construction stated in the Corrected Joint Claim Construction Statement, because the court assumes that the construction in the Corrected Joint Claim Construction Statement included a typographical error. *See supra*, note 5.

the basket from the mold core, which Maytag defines as preparing to remove the basket from the mold, and actually "removing" the basket from the molding machine. Maytag contends that it is the first step that is claimed in Claim 7. Maytag contends that dependent Claims 8 and 9 describe the details of the "ejection" step, but that the separate step of removing the basket from the molding machine is not part of the claimed invention. Maytag contends that Electrolux's construction ignores the distinction between "ejecting" and "removing" in the '809 patent.

In its initial brief, Electrolux argues that its construction is mandated by the words of the claim itself, because the *ejection*, *i.e.*, the *removal*, of the washing machine basket from the molding apparatus is achieved by moving the cavity cover members and sidewall members away from the mold core. Electrolux contends that Maytag's construction rewrites the claim terms to mean "preparing" the basket for ejection, by performing steps "including at least" the steps stated in the claim. Electrolux argues that the plain language of the claim stands against construing "ejecting" to mean "preparing the basket to be ejected." Electrolux also argues that the Examiner rejected Maytag's present construction during the prosecution of the application for the '809 patent and that, in response, Maytag surrendered a "preparing" claim, which claimed "preparing for removal of the plastic washing machine basket from the apparatus by outward movement of sidewall assemblies with the core pins relative to the mold core," in favor of the current "ejecting" language. Thus, Electrolux argues that Maytag is improperly attempting to recapture surrendered subject matter.

In its rebuttal brief, Maytag argues that Electrolux's construction completely ignores the context of the "ejecting" language in the '809 patent specification. First, Maytag reiterates that "ejecting" and "removing" have two distinct meanings in the context of the patent, specifically, that the washing machine basket must be "ejected" so that it can be

"removed." Where Claim 6 uses "remove" and Claim 7 uses "eject," Maytag argues that the terms are presumed to mean different things, and that the patentee has also shown that it chose not to use the term "remove" in Claim 7. This same intrinsic evidence, Maytag contends, shows that there is no impropriety in its own definition of "ejecting" as "preparing the basket for removal." Maytag also contends that Electrolux has blatantly misrepresented the prosecution history, because what the patentee did in response to the Examiner's rejection was to add a limitation requiring that the basket be removed from the apparatus after being prepared to be removed, and the Examiner withdrew his objection to the "preparing for removal" limitation. Maytag contends that the patentee subsequently cancelled the "preparing to remove" claim for unrelated reasons, but that the cancelled application claim was not the precursor of patent Claim 7. Maytag also contends that Electrolux is improperly attempting to limit the manner in which the cavity cover member is separated from the mold core.

In its rebuttal brief, on the other hand, Electrolux reiterates that Maytag's construction is improper, because it attempts to regain claim scope that was expressly surrendered during prosecution of the '809 patent and imports the limitation "at least," thereby rewriting the claim by removing the requirement that the step be performed "by" the stated movement of the molding apparatus, not "at least by" such movement. Electrolux contends that Maytag's arguments concerning "ejecting" and "removing" are a red herring, because Electrolux can accept the construction "moving the formed plastic washing machine basket from the mold core to the ejection position by the operation of moving the cavity cover member away from the mold core and shifting the sidewall members away from the mold core." What Electrolux cannot accept, however, is that this "ejecting" is accomplished by "at least" these steps, when the claim states that "ejecting" is accomplished "by" these steps.

In its surrebuttal, Maytag argues that Claim 7 states the method for making a washing machine basket "comprising," *inter alia*, the ejection process. Maytag asserts that it is black letter law that "comprising" before a list of elements does *not* exclude additional, unrecited elements or method steps. Maytag contends that Electrolux is reading "comprising" to mean "consisting of," that is, to exclude any elements, steps, or ingredients not specified in the claim. Maytag contends that use of "comprising" means that the words "at least and potentially more" are inherently implied into each limitation of Claim 7. Electrolux's construction, Maytag argues, would exclude Claims 8 and 9, which are dependent claims stating additional steps in the ejection process, as Electrolux contends that the ejection must be accomplished only by the steps in Claim 7. Similarly, Maytag asserts that Electrolux's concession about "ejecting" and "removing" is just another moving target, but also cements Maytag's construction, "preparing the formed plastic washing machine basket for removal from the mold core," as the proper construction. In its surrebuttal, Electrolux reiterates that Maytag surrendered the "preparing to remove" construction to avoid rejection during prosecution of the patent by amending the claim to require actual removal of the basket and cannot now recapture such a meaning for the claim language.

The parties returned to construction of this claim at the *Markman* hearing oral arguments. However, the parties' oral arguments were in response to the court's proposed construction of this term in the tentative draft of this ruling circulated to the parties prior to the *Markman* hearing. Therefore, the court will address the parties' oral arguments below, in the context of the court's construction.

iii. Analysis. Beginning, as always, with the language of the claim in which the disputed language appears, *see Nystrom*, 424 F.3d at 1142 (construction begins with the words of the patent); *Biagro*, 423 F.3d at 1302 (same), the court finds neither party's

construction of the first clause of this term to be entirely satisfactory. First, the court finds that the claim language "*ejecting* the washing machine basket *from the apparatus*," *see* the '809 patent, Claim 7 (emphasis added), simply will not support Maytag's construction of the term as "*preparing* the formed plastic washing machine basket *for removal* from the mold." The claim language plainly signifies something more that *preparation* to do something to the washing machine basket; instead, it plainly indicates *doing* something to or with the washing machine basket, specifically, "ejecting [it] from the apparatus." Maytag's construction does not indicate that the washing machine basket is even moved relative to the mold core, let alone "ejected" from the apparatus.

Nor is the court persuaded that nonasserted Claim 6, a dependent claim to Claim 5, necessarily teaches that "ejecting" means something different from "removing," as Maytag contends. *But see Nystrom*, 424 F.3d at 1143 ("When different words or phrases are used in separate claims, a difference in meaning is presumed."). Claim 6, in its entirety, claims the following:

> **6**. A method for manufacturing as set forth in claim **5** wherein *the step of displacing the molded tub* from the mold core is performed simultaneously *with the step of displacing the mold side dies*, and is *followed by the step* of extending a rod member *to further remove* the molded tub from the mold assembly.

The '809 patent, Claim 6 (emphasis added). The italicized language suggests a step of "displacing" the molded tub from the mold core, which appears to be at least roughly analogous to "ejecting the washing machine basket from the apparatus," as stated in the disputed portion of Claim 7, and then indicates that the molded basket is "*further* remove[d]" from the mold core by extending a rod member, which suggests that "remov[ing]" is the *same* as "displacing" or "ejecting." It does *not* suggest that

"removing" means *only* removal from the apparatus, while "ejecting" means displacement or separation from the mold core, nor does it suggest that the "ejecting" is only "preparation" for removal of the washing machine tub from the apparatus.

Moreover, the portions of the specification cited by Maytag do not support Maytag's construction. *See Phillips*, 415 F.3d at 1314-16 (the specification remains of "central importance" to determining the proper construction of the term and may even be "dispositive"). Rather, both cited portions of the specification support the notion that there is a two-step "ejection process" to remove the plastic washing machine basket, first, from the mold core and, second, from the apparatus. *See* the '809 patent, Summary Of The Invention, col. 2, ll. 15-23 ("After cooling of the plastic material, the various core pins are used to remove the molded plastic washing machine basket from the mold core during an ejection process by shifting the basket relative to the mold core through the interengagement of the core pins with the apertures formed in the sidewall of the basket. A stripper ring and an ejection system, are also provided to aid in removing the molded basket from the mold core."); Detailed Description, col. 6, ll. 3- 48 (describing the method for removing the washing machine basket, first, from the mold core, and second, from the apparatus). The fact that the "ejection process" involves at least two steps in the Detailed Description does not necessarily mean that the first step is merely "preparation" for the other.

More specifically, the portion of the Detailed Description cited by Maytag does not support Maytag's construction of "ejecting" as "preparing the washing machine basket for removal," even though that portion appears to distinguish between steps for removal of the washing machine basket from the mold core and removal of the washing machine basket from the entire apparatus. Rather, it describes an "initial ejection phase" for the basket, involving "remov[ing] a molded article from a mold core," and a final stage in which the

"basket **2** can be removed [from the apparatus] by means of a robot arm or other transport system." *See* the '809 patent, col. 6, *ll.* 3-42. Indeed, this portion of the specification describes *both* steps as involving "removing" the basket, albeit in the first instance from the mold core and in the second instance from the entire apparatus. Thus, Maytag is making a distinction in the use of *words* that is not apparent from the *claims* or the *specification*, even where the claims and the specification distinguish between the steps for "remov[ing]" the washing machine basket *from the mold*, and "remov[ing]" the washing machine basket *from the entire apparatus*.[13]

At this point, because the court has not found that the patentee acted as its own "lexicographer" to provide a definition of "ejecting" that must govern, *compare Phillips*, 415 F.3d at 1316 (the patentee may act as lexicographer, and when the patentee does so, its definition must govern), and the court has not found the specification to be "dispositive" in this case, *compare id.* at 1314-16 (the specification remains of "central importance" to determining the proper construction of the term and may even be "dispositive"), the court finds it appropriate to look to a standard dictionary definition of "ejecting" to assist in discovering the commonly understood meaning of the word. *See Free Motion Fitness, Inc.*, 423 F.3d at 1348 ("*Phillips* confirms that courts may '"rely on dictionary definitions when construing claim terms"' and that '[d]ictionaries . . . are often useful to assist in understanding the commonly understood meaning of words.'") (quoting *Phillips*, 415 F.3d at 1322, in turn quoting *Vitronics Corp.*, 90 F.3d at 1584 n.6). For example, definitions of "eject" include "to drive out esp[ecially] by physical force," and

[13]Because Maytag's "preparing" construction plainly is not supported by the plain language of the claims or by the specification, the court finds it unnecessary to consider the parties' dispute over whether the prosecution history reveals that Maytag surrendered a "preparing" construction.

"to throw out or off from within." *See* MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY (10th ed. 1995) (definitions 1 a and 2 of "eject *vt*"). These dictionary definitions suggest that defining "ejecting" merely as "removing," as Electrolux has proposed, misses the point concerning the manner of removal, *i.e.*, by force.

Thus, the court proposed in its tentative draft of this ruling that the ordinary meaning of "ejecting the washing machine basket from the apparatus," even to one of skill in the art reading the term in the context of the patent claim and specification, is "forcing the washing machine basket out of the apparatus." The court found that this construction of "ejecting . . . from" in Claim 7 as "forcing . . . out of" is reinforced by the language of Claim 8, which also pertains to "ejecting the plastic washing machine basket from the apparatus," this time specifically by "forcing the plastic washing machine basket to shift relative to the mold core." However, Maytag asserted at the *Markman* hearing oral arguments that the court's construction should be refined to be "forcing . . . *from*," rather than "forcing . . . *out of*," because the actual claim language is "ejecting . . . *from*," and "out of" improperly implies complete removal from the apparatus. Electrolux concurred in this amendment of the court's proposed construction, and the court sees the wisdom of closer adherence to the claim language. Therefore, the court finds that the ordinary meaning of "ejecting the washing machine basket from the apparatus," even to one of skill in the art reading the term in the context of the patent claim and specification, is "forcing the washing machine basket from the apparatus."

At the *Markman* hearing oral arguments, Maytag also asserted that the construction of this term should recognize that the "ejection" is only to an "ejection position," not completely out of the apparatus, which is accomplished in a subsequent step, for example, by a robot arm, but which is not actually claimed as part of the invention. Maytag contended that simply including "ejecting . . . from the apparatus *to the ejection position*"

would suffice, as the "ejection position" is plainly shown by the "solid" washing machine basket partially out of the mold in Figure 4, not by the "dashed" washing machine basket shown fully out of the mold. *See* the '809 patent, Fig. 4 (reproduced above, on page 18). Electrolux concurred that some indication of the "ejection position" should be part of the construction of this term, but contended that "ejection position" should be defined as "a position from which the washing machine basket can be readily removed from the mold core." Maytag, however, rejected this further definition of "ejection position," because the claim does not define "ejection position," so that Electrolux's definition would improperly import a limitation from the preferred embodiment. Electrolux rejoined that the reading of the claims must be informed by the specification, and that the specification clearly states what "ejection position" means. The court is not persuaded that any further indication of the position to which the washing machine basket is "ejected" is required. Claim 7 unambiguously states that the washing machine basket is "ejected," at this step, "from the apparatus." *See* the '809 patent, Claim 7. As explained above, this step is distinct from "removing" the washing machine basket from the apparatus entirely, for example, by means of a robot arm. The court declines to import a limitation from the specification into what is unambiguous claim language. *See Playtex Prods., Inc.*, 400 F.3d at 906 ("The court must take care in its analysis, when locating in the written description the context for a disputed term, not to import a limitation from that written description. It must use the written description for enlightenment and not to read a limitation from the specification [into the construction of the term].") (citing *Comark Comms.*, 156 F.3d at 186-87). Therefore, the court declines to add any specification of the position to which the washing machine basket is "ejected" in Claim 7.

The second clause of this disputed term concerns what element in the claimed invention actually does the "ejecting." Claim 7 states that the "ejecting" is done "by

separating the mold core and cavity cover member and shifting the cavity sidewall members away from the mold core." Maytag contends that the "ejecting" is done "by *performing steps including at least* separating the mold core and the cavity cover member and moving the cavity sidewall members away from the mold core." Electrolux, on the other hand, contends that the "ejecting" is done *exclusively* "by *the operation of moving* the cavity cover member away from the mold core *and shifting* the sidewall members." Again, the court finds neither party's construction of this clause of the term to be satisfactory.

Maytag is correct that this claim of the '809 patent uses "comprising" before a list of elements. *See* the '809 patent, Claim 7 ("A method of making an integral, smooth and uniformly constructed plastic washing machine basket . . . comprising . . . ."). Maytag is also correct that "comprising," when used in a patent claim, is an "'open' transition phrase" that "may cover devices that employ additional, unrecited elements," in contrast to "consisting of," which is a "'closed' transition phrase" that is "understood to exclude any elements, steps, or ingredients not specified in the claim." *AFG Indus., Inc. v. Cardinal IG Co., Inc.*, 239 F.3d 1239, 1244-45 (Fed. Cir. 2001) (explaining that this has been the "consistent" understanding of these phrases by the Federal Circuit Court of Appeals). Such an understanding of "comprising" does not bring the court to the conclusion Maytag intends, however. It is clear that the "method of making an integral, smooth and uniformly constructed plastic washing machine basket" is claimed in Claim 7 as "comprising" the "injecting" and "ejecting" steps, and thus, "may cover devices that employ additional, unrecited elements." *Id.* However, Maytag has cited no authority for its contention that the "'open' transition phrase" "comprising" must also be read into each limitation of Claim 7. In other words, the "method of making an integral, smooth and uniformly constructed plastic washing machine basket" may "compris[e]" additional,

unrecited" steps besides the "injecting" and "ejecting" steps expressly claimed, but that does not mean that each step as expressly claimed is not complete in and of itself.

Moreover, the court simply is not persuaded by Maytag's assertion that reading "by" to mean simply "by" in the disputed portion of Claim 7—instead of reading "by" to mean "by performing steps including at least," as Maytag advocates—somehow reads dependent Claims 8 and 9 out of the patent. Dependent Claims 8 and 9 claim the following:

> **8**. The method of claim **7**, further comprising: utilizing the core pins to aid in ejecting the plastic washing machine basket from the apparatus with the core pins forcing the plastic washing machine basket to shift relative to the mold core as the cavity sidewall members are shifted away from the mold core due to the engagement of the core pins in the beveled apertures of the plastic washing machine basket.
>
> **9**. The method of claim **8**, further comprising: aiding in ejecting the washing machine basket by substantially, linearly shifting a stripper ring, that engages the terminal edge of the plastic washing machine basket, relative to the mold core.

The '809 patent, Claims 8 & 9. These dependent claims do not claim that the "ejecting [of] the washing machine basket" is accomplished "by" anything other than "separating the mold core and cavity cover member and shifting the cavity sidewall members away from the mold core," as claimed in the disputed portion of Claim 7. Rather, dependent Claims 8 and 9 claim the method of Claim 7 (or Claim 8, in the case of Claim 9) "further comprising" limitations that only "*aid*[ ] in ejecting the plastic washing machine basket." *See* the '809 patent, Claims 8 & 9 (emphasis added). In other words, the additional limitations claimed in the dependent claims only *assist* "separating the mold core and cavity cover member and shifting the cavity sidewall members away from the mold core"

in "ejecting the plastic washing machine basket." Maytag has cited no authority for the proposition that, where a patentee claims in one claim that certain means are *sufficient*, in and of themselves, to accomplish an end—in this case, that "separating the mold core and cavity cover member and shifting the cavity sidewall members away from the mold core" are sufficient to "eject[ ] the plastic washing machine basket," as the patentee has claimed in Claim 7 of the '809 patent—it would be inconsistent for dependent claims to claim additional structures on the elements ("core pins" on the "cavity sidewall members" in Claim 8) or even additional elements ("substantially, linearly shifting a stripper ring" in Claim 9) in an independent claim that "aid" in accomplishing the same end.

Finally, the court finds unpersuasive Electrolux's construction of this last clause as "by the operation of moving the cavity cover member away from the mold core and shifting the sidewall members." First, inserting "by operation of" simply adds unnecessary words to what is unambiguously claimed as "by separating" certain members (the mold core and cavity cover member) and "[by] shifting" other members away from each other (the cavity sidewall members away from the mold core). Furthermore, Electrolux's construction does not take into account the relative motion of the "sidewall members" when "shifting," which according to the unambiguous claim language is "*away from* the mold core." *See* the '809 patent, Claim 7 (emphasis added).

Therefore, the court construes the disputed claim term "ejecting the washing machine basket from the apparatus by separating the mold core and cavity cover member and shifting the cavity sidewall members away from the mold core" as follows: "forcing the washing machine basket from the apparatus by separating the mold core and cavity cover member and shifting the cavity sidewall members away from the mold core."

d. The first disputed term in Claim 8: "Utilizing the core pins to aid in ejecting"

i. Claim language. Two terms in Claim 8 of the '809 patent are also "in dispute" at this time. The first such term is "utilizing the core pins to aid in ejecting." Claim 8, with the disputed term italicized, states the following:

> **8**. The method of claim **7**, further comprising: *utilizing the core pins to aid in ejecting* the plastic washing machine basket from the apparatus with the core pins forcing the plastic washing machine basket to shift relative to the mold core as the cavity sidewall members are shifted away from the mold core due to the engagement of the core pins in the beveled apertures of the plastic washing machine basket.

The '809 patent, Claim 8 (emphasis added).

ii. The parties' definitions and arguments. The parties' proffered definitions of this term are shown below, with bold font indicating differences between their definitions. Also, the authority on which each party relies for its definition is shown just below that party's definition.

"UTILIZING THE CORE PINS TO AID IN EJECTING"	
Maytag's Definition	**Electrolux's Definition**
"using the core pins **to assist in shifting or moving** the plastic washing machine basket **relative to the mold core**"	"using the core pins **to actively assist in removing** the formed plastic washing machine basket **from the mold core**"
Maytag's Authority	**Electrolux's Authority**
'809 patent, col. 6, ll. 6-44; claim 8.	'809 Patent at col. 2, lines 16- 18; col. 6, lines 24-27; dictionary definitions of "utilizing"

In its initial brief, Maytag argues that the claim language plainly refers to using the core pins to assist in shifting or moving the plastic washing machine basket relative to the

mold core and that no further construction of the claim language is necessary. In further support of this "plain language" construction, Maytag points out that the specification states, "During the initial lifting of stripper ring **96**, each of the core pins **191** will be engaged within a respective aperture **44** of the basket **2** to provide a lifting force about the entire periphery of mold core **90**." The '809 patent, col. 6, *ll.* 23-26. Maytag contends that Electrolux's construction is improper, because "aid" means "assist," but "actively assist," as Electrolux construes the term, creates a different, unwarranted connotation. Maytag also asserts that the claim refers to "ejecting," not "removing," as Electrolux contends, and that, as Maytag has previously argued, "ejecting" and "removing" are different operations in the '809 patent.

For its part, Electrolux argues in its initial brief that the '809 patent makes clear that the core pins "aid in ejecting," not merely aid in "shifting" the washing machine basket relative to the mold core. Moreover, Electrolux argues that the way in which the core pins "aid in ejecting" is by providing a "lifting force" on the washing machine tub due to engagement of the core pins with the apertures of the tub. Thus, Electrolux argues, the pins must do something active to aid in ejecting the product from the mold core. Electrolux asserts that Maytag's definition collapses Claim 8 into Claim 9 and removes important limitations from the claim term. Specifically, Electrolux argues that Maytag ignores "ejecting" and substitutes "shifting or moving," which are not the same thing, thereby making either Claim 8 or Claim 9 surplusage. Electrolux also argues that Maytag ignores "utilizing," which must indicate that the core pins are put to use to aid in ejecting the washing machine basket, not just to "shift" the basket relative to the core.

In its rebuttal brief, Maytag contends that Electrolux is asserting a construction that requires the core pins to do *more* than just aid, and instead, to "actively engage" in the process of ejecting the washing machine basket. Such a construction, Maytag contends,

would improperly import limitations into a claim that is not otherwise so limited. In its rebuttal brief, however, Electrolux argues that the principal dispute is over the meaning of "utilizing," because Maytag wants that term left vague to facilitate its infringement argument. Electrolux argues that the context of the infringement dispute is important to construction of the term, noting that, in its own process, the core pins do not "eject," "remove," or otherwise move the molded basket. Because its process does not involve the core pins in this way, Electrolux argues that Maytag is trying to preserve its infringement argument by an improper claim construction that glosses over the function of the core pins. In light of the claim language, however, Electrolux argues that "utilizing" the core pins means that they do more than exercise some de minimis or incidental force; rather, it means that the core pins actively aid the ejection process.

In its surrebuttal, Maytag asserts that there is no basis for Electrolux's importation of the word "actively" into the construction of this claim term. There is no necessary connection, Maytag contends, between "utilizing" something and "actively assisting." Moreover, Maytag argues that Electrolux has admitted that its proposed construction is a blatant effort to compare the '809 patent with Electrolux's accused device. In its surrebuttal, Electrolux contends that no further response is required.

iii. Analysis. Beginning with the language of the claim in which the disputed term appears, *see Nystrom*, 424 F.3d at 1142 (construction begins with the words of the patent); *Biagro*, 423 F.3d at 1302 (same), the court cannot help noticing that Maytag's construction of "ejecting" in Claim 8 is different from its construction of "ejecting" in Claim 7. Where Maytag previously argued that "ejecting" in Claim 7 must mean "preparing . . . for removal," it now argues that "ejecting" in Claim 8 must mean "shifting or moving . . . relative to the mold core." As Maytag itself has asserted, "claim terms are presumed to be used consistently throughout the patent, such that the usage of

a term in one claim can often illuminate the meaning of the same term in other claims." *Research Plastics, Inc.*, 421 F.3d at 1295 (citing *Phillips*, 415 F.3d at 1313-14). Thus, where the court construed "ejecting the washing machine basket from the apparatus" in Claim 7 to mean "forcing the washing machine basket from the apparatus," the court is constrained, for the same reasons and for the sake of consistency, and by any reasonable reading of the patent claims, specification, and meaning of the terms, to construe "ejecting the plastic washing machine basket from the apparatus" to mean the same thing in Claim 8.

The real "fighting issue" in this claim, however, is not the construction of "ejecting," but the construction of the meaning of "*utilizing the core pins to aid*" in "ejecting." The parties agree, and so does the court, that "utilizing" in the context of the claim language and the specification means "using." *See, e.g.,* MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY (10th ed. 1995) (defining "utilize *vt*" as "to make use of"). Thus, the focus of the dispute becomes the meaning of "to aid," *i.e.*, how the core pins are "used" to "aid" in "ejecting the washing machine basket from the apparatus." While the court agrees with the parties that "to aid" means "to assist," in the context of the claim and the specification, the court concludes that there is nothing about the claim language that supports Electrolux's insertion of the modifier "actively" before "aid." Moreover, the court finds that the remainder of Claim 8 expressly states how the core pins are "used to assist" in ejecting the washing machine basket from the apparatus: the core pins "forc[e] the plastic washing machine basket to shift relative to the mold core as the cavity sidewall members are shifted away from the mold core due to the engagement of the core pins in the beveled apertures of the plastic washing machine basket." The '809 patent, Claim 8.

Thus, the court's construction of the disputed claim term "utilizing the core pins to aid in ejecting" is the following: "using the core pins to assist in forcing the washing machine basket from the apparatus."

e. The second disputed term in Claim 8: "Core pins forcing the plastic washing machine basket to shift relative to the mold core"

i. Claim language. The second disputed term in Claim 8, and the last term that the court finds is "in dispute" at this time, and thus, requiring construction, is "core pins forcing the plastic washing machine basket to shift relative to the mold core." Claim 8, with the disputed term italicized, states the following:

> **8**. The method of claim **7**, further comprising: utilizing the core pins to aid in ejecting the plastic washing machine basket from the apparatus with the *core pins forcing the plastic washing machine basket to shift relative to the mold core* as the cavity sidewall members are shifted away from the mold core due to the engagement of the core pins in the beveled apertures of the plastic washing machine basket.

The '809 patent, Claim 8 (emphasis added).

ii. The parties' definitions and arguments. The parties' proffered definitions of this term are shown below, with bold font indicating differences between their definitions. Also, the authority on which each party relies for its definition is shown just below that party's definition.

"CORE PINS FORCING THE PLASTIC WASHING MACHINE BASKET TO SHIFT RELATIVE TO THE MOLD CORE"	
Maytag's Definition	**Electrolux's Definition**
"the core pins **provide a lifting or axial force** to **shift or slightly move** the washing machine basket **about the mold core**"	"the formed plastic washing machine basket is **separated from the mold core** by the operation of the core pins **when the cavity side wall members are shifted away from the mold core**"
Maytag's Authority	**Electrolux's Authority**
'809 patent, col. 6, ll. 6-44; claim 8	'809 Patent at col. 2, lines 16-19; col. 6, lines 10-15 and lines 24-27.

In its initial brief, Maytag argues that Claim 8 of the '809 patent not only states that the core pins aid in ejecting the basket from the mold core, but describes how this is done. Maytag contends that this language is so clear on its face that any claim construction should closely track the language used in the claim. The precise language Maytag has chosen in its construction, Maytag contends, is consistent with this clear language and the pertinent part of the specification. On the other hand, Maytag asserts that Electrolux's use of "separating" to mean "shifting" is improper, because the two terms have different meanings. Maytag also contends that describing the washing machine basket as "separated from the mold core" is a "backdoor" approach to redefining the claim to confuse "ejection" with "removal."

In its initial brief, however, Electrolux contends that this claim limitation is directed to the use of the core pins to cause the molded product to shift and separate from the mold core when the sidewalls, where the pins are located, are shifted. Electrolux contends that Maytag attempts to collapse this claim term with the previous claim limitation, "utilizing the core pins to aid in ejecting." Indeed, Electrolux contends that Maytag's construction

would make the two limitations essentially synonymous. Electrolux also contends that Maytag is importing claim limitations, such as "axial" force and "slightly," that are not found in the claim language or the file history.

In its rebuttal brief, Maytag asserts that Electrolux's construction is improper, because "shift" connotes a minor adjustment, while "separate" connotes a major adjustment and potentially even complete removal of the basket from the mold core. However, Maytag points out that the specification uses the word "separate" in the context of removing bores from guide rods. In short, Maytag contends that Electrolux's definition again improperly requires complete removal of the basket. For its part, Electrolux asserts in its rebuttal brief that, while asserting that the construction of this term should closely track the claim language, Maytag improperly imports two limitations not found in the claim: "axial force" and "slightly." However, Electrolux contends that neither importation is supported by the claim language, the specification, or the file history, and Maytag does not even offer supporting citations from such sources. Moreover, Electrolux argues that the specification makes clear that the molded product is moved to the "ejection position," so that "slightly" moving the washing machine basket is a misleading construction. Finally, Electrolux contends that nothing in the patent requires that the lifting force be an "axial" force.

In its surrebuttal brief, Maytag asserts that it is not attempting to import any limitations into the claim language. Rather, Maytag contends that its proposed construction uses "to shift or slightly move" to define "shift," so that "slightly" only modifies "move," not "shift." Maytag contends that such a definition of "shift" is what would be understood by one of ordinary skill in the art and is consistent with dictionary definitions. However, Maytag contends that it would be content to let "shift" speak for itself. Maytag also contends that Electrolux's argument about "axial force" is a red

herring, because not only would one of ordinary skill in the art understand the core pins' force on the basket to be "axial," but that this term is tangential to the real dispute between the parties. Therefore, Maytag asserts that it would be willing to drop "axial" from its definition, and instead, urges the court to construe the term to mean "the core pins provide a lifting force to shift the washing machine basket about the mold core." This construction, Maytag asserts, removes all of Electrolux's concerns. In its surrebuttal, Electrolux contends that no further response is required.

iii. Analysis. Beginning with the language of the claim in which the disputed language appears, *see Nystrom*, 424 F.3d at 1142 (construction begins with the words of the patent); *Biagro*, 423 F.3d at 1302 (same), it appears to the court that there is little or nothing about this term that requires construction. The court observed, just above, in reference to the other term in Claim 8 that is "in dispute" at this time, that Claim 8 expressly states how the core pins "aid," that is, are "used to assist," in ejecting the washing machine basket from the apparatus: the core pins "forc[e] the plastic washing machine basket to shift relative to the mold core as the cavity sidewall members are shifted away from the mold core due to the engagement of the core pins in the beveled apertures of the plastic washing machine basket." The '809 patent, Claim 8. The court finds nothing inherently vague or confusing about this language. Nevertheless, the court will consider, albeit briefly, specific aspects of the parties' constructions.

While the core pins "aid" in "ejecting the washing machine basket from the apparatus," which suggests that the washing machine basket is ultimately "separated" from the mold core, the precise portion of the claim language now at issue relates only to the extent of the "aid" provided by the core pins, which is only to "forc[e] the washing machine basket *to shift* relative to the mold core." *Id.* (emphasis added). Therefore, the court agrees with Maytag that it is inappropriate, in light of the claim language, to adopt

Electrolux's use of "to separate from" as synonymous with "to shift relative to." Indeed, to the extent that guidance from a standard dictionary is helpful to determine the ordinary meaning of the word, *see Free Motion Fitness, Inc.*, 423 F.3d at 1348 ("*Phillips* confirms that courts may '"rely on dictionary definitions when construing claim terms"' and that '[d]ictionaries . . . are often useful to assist in understanding the commonly understood meaning of words.'") (quoting *Phillips*, 415 F.3d at 1322, in turn quoting *Vitronics Corp.*, 90 F.3d at 1584 n.6), "shift" means, for example, "to change the place, position, or direction of: MOVE," not "to separate." *See, e.g.,* MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY (10th ed. 1995) (definition of "shift *vt*). The court also finds that the plain language of the term supports Maytag's elimination of "slightly" and "axial force" from the construction of the claim, because "shift" requires no further modifier, and "axial force" is found nowhere in the patent claim or pertinent part of the specification.

The final issue is whether Maytag is correct to include a definition of the nature of the "forcing" by the core pins as "provid[ing] a lifting force." Such language concerning the force provided by the core pins does, indeed, appear in the specification. *See* the '809 patent, col. 6, *ll.* 23-26 ("During the initial lifting of stripper ring **96**, each of the core pins **191** will be engaged within a respective aperture **44** of basket **2** *to provide a lifting force* about the entire periphery of mold core **90**.") (emphasis added). However, to import this language might be improper, because it would be reading a limitation from the specification into the construction of the term, where no such limitation is actually claimed or necessary to the understanding of the claim language. *See Playtex Prods., Inc.*, 400 F.3d at 906 ("The court must take care in its analysis, when locating in the written description the context for a disputed term, not to import a limitation from that written description. It must use the written description for enlightenment and not to read a

limitation from the specification [into the construction of the term].") (citing *Comark Comms.*, 156 F.3d at 186-87). Consequently, the court finds "forcing" sufficient by itself.

Therefore, the court concludes that the claim term "core pins forcing the plastic washing machine basket to shift relative to the mold core" is unambiguous, so that no further construction is required.

III. CONCLUSION

Perhaps the most effective way to present the court's conclusions is to present a side-by-side comparison of the claim language that the court finds is actually in dispute with each party's proffered construction and the court's own construction. Such a comparison follows:

THE '909 (PRODUCT) PATENT				
Claim Term		**Maytag's Definition**	**Electrolux's Definition**	**Court's Definition**
Claim 23				
f.	groove	"a **narrow** depression, channel or trough **in a surface**"	"a depression, channel or trough **in the sidewall surface of the basket formed by a corresponding projection on the mold core**"	"a narrow depression, channel or trough in a surface."
Claim 25				
a.	Annular sidewall . . . diverging radially outwardly to an upper terminal edge	"a sidewall **formed like a ring and having a radius measured from the vertical center axis *to the sidewall* that increases moving from the base wall to the edge of the access opening of the sidewall**"	"**the structure of** the sidewall **is disposed from a central axis a greater distance at the top edge than at the bottom**"	"a sidewall shaped like a ring . . . continuously increasing in radius from the central axis moving from the base wall to the edge of the sidewall at the open end of the washing machine basket."
Claim 26				
a.	knit lines **[identified as in dispute by Maytag, but not argued in Maytag's first brief]**	"a line that **visually indicates a defect** on a molded plastic article **caused by the meeting of two flow fronts during the molding operation"**	"lines that **may or may not be visible** to the human eye **that form when the molten plastic flows around the core pins and then solidifies**"	"lines formed when two flow fronts of molten plastic meet during the molding operation"

THE '909 (PRODUCT) PATENT				
Claim Term		**Maytag's Definition**	**Electrolux's Definition**	**Court's Definition**
Claim 27				
a.	burrs at the apertures	"a **rough, sharp or jagged edge or area** remaining on the **inner surface** of the sidewall after holes have been **formed by perforating, cutting or drilling**"	"**irregularities, roughness or projections**, where the apertures are **formed**, on the **inner or outer surface** of the sidewall of the plastic washing machine basket"	"Rough areas at the apertures remaining after material is shaped, cut, cast, or drilled."

THE '809 (PROCESS) PATENT				
Claim Term		**Maytag's Definition**	**Electrolux's Definition**	**Court's Construction**
Claim 7				
a.	a base wall including a peripheral portion from which extends an annular sidewall *that diverges radially outwardly* to a terminal edge	"A base wall including a peripheral portion from which extends an annular sidewall **having a radius measured from the vertical center axis to the sidewall that increases from the base wall to the terminal edge**"	"the bottom wall of the washing machine basket is the base wall; the peripheral portion of the base wall is the outside edge of the bottom wall of the washing machine basket; the sidewall of the washing machine basket is **disposed from a central axis a greater degree at the top edge than at the bottom; the terminal edge is the top edge of the sidewall**"	"a base wall including a perimeter from which extends a sidewall shaped like a ring that continuously increases in radius from the central axis moving from the base wall to the edge of the sidewall at the open end of the washing machine basket."

THE '809 (PROCESS) PATENT				
Claim Term		**Maytag's Definition**	**Electrolux's Definition**	**Court's Construction**
Claim 7 (cont'd)				
e.	cavity cover member spaced about an end of the mold core	"a **section** of the mold **extending about and spaced from an end of the mold core**"	"a **cover** that is **adapted to abut the cavity sidewall members when** the molding apparatus is in a **closed** mold position and which is **spaced from the cavity sidewall members when** the molding apparatus is in an **open** mold position"	"a part of the molding apparatus that is spaced about an end of the mold core and abutting the cavity sidewall members so as to define a cavity between the mold core and both the cavity cover member and the cavity sidewall members."
g.	"ejecting the washing machine basket . . . by separating the mold core and cavity cover member and shifting the cavity sidewall member away from the mold core"	"**preparing** the formed plastic washing machine basket **for removal** from the mold **by performing steps including at least separating the mold core and the cavity cover member and moving the cavity sidewall member away from the mold core**"	"**removing** the formed plastic washing machine basket from the mold **core by the operation of moving the cavity cover member away from the mold core and shifting the sidewall members**"	"forcing the washing machine basket from the apparatus by separating the mold core and cavity cover member and shifting the cavity sidewall members away from the mold core"
Claim 8				
a.	utilizing the core pins to aid in ejecting	"using the core pins **to assist in shifting or moving** the plastic washing machine basket **relative to the mold core**"	"using the core pins **to actively assist in removing** the formed plastic washing machine basket **from the mold core**"	"using the core pins to assist in forcing the washing machine basket from the apparatus."

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Claim Term		**Maytag's Definition**	**Electrolux's Definition**	**Court's Construction**
Claim 8 (cont'd)				
b.	core pins forcing the plastic washing machine basket to shift relative to the mold core . . .	"the core pins **provide a lifting or axial force** to **shift or slightly move** the washing machine basket **about the mold core**"	"the formed plastic washing machine basket is **separated from the mold core** by the operation of the core pins **when the cavity side wall members are shifted away from the mold core**"	[unambiguous term requiring no further construction]

The court hereby adopts the foregoing as its constructions of the patent claims "in dispute" at this time.

IT IS SO ORDERED.

DATED this 19th day of January, 2006.

Mark W. Bennett

MARK W. BENNETT
CHIEF JUDGE, U. S. DISTRICT COURT
NORTHERN DISTRICT OF IOWA